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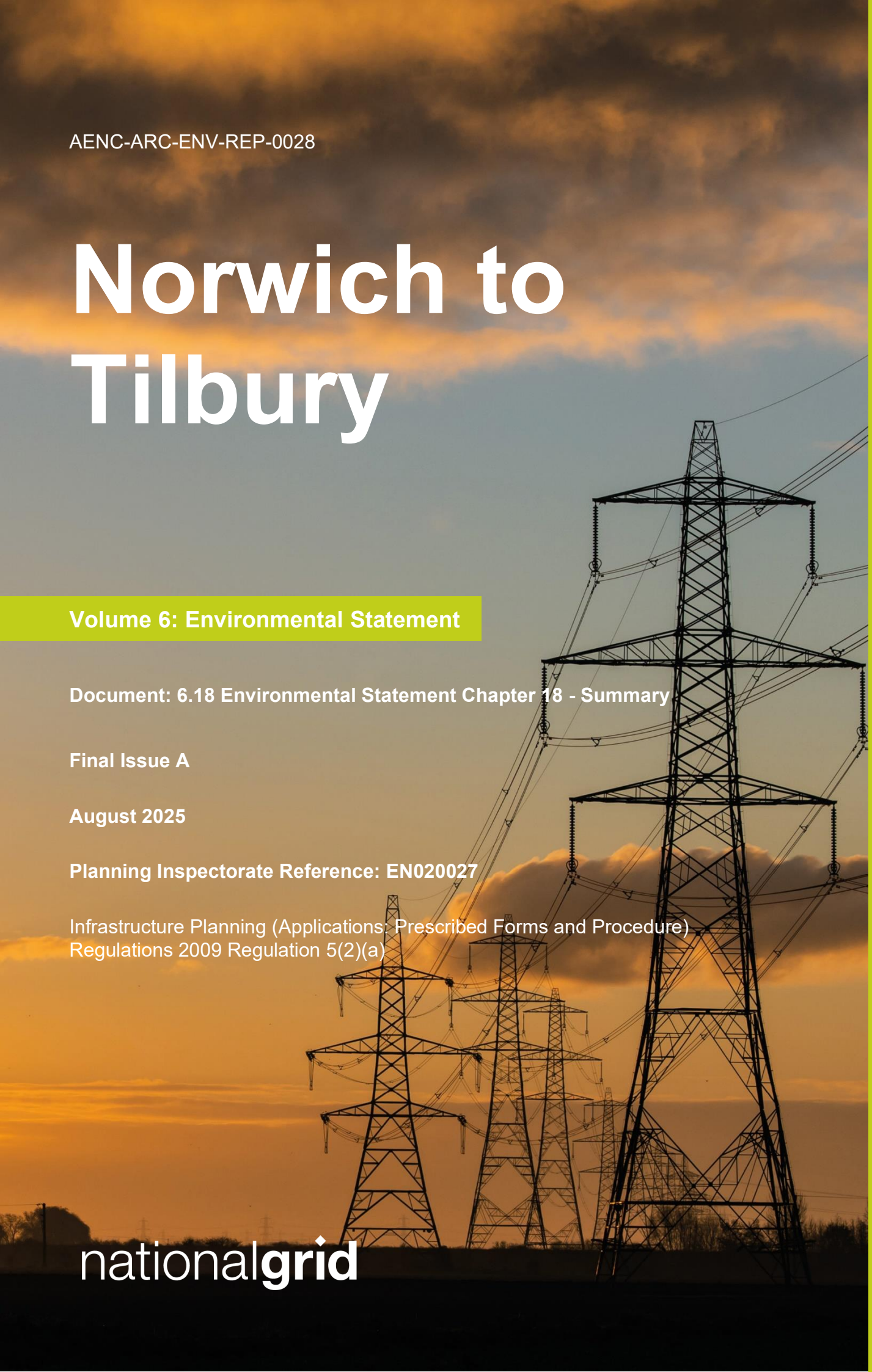

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18. Summary

18.1 Introduction

18.1.1 This chapter summarises the likely significant effects that are anticipated from Norwich to Tilbury ('the Project') as identified within the Environmental Statement (ES). As stated in each of the environmental topic chapters, the assessments assume that all mitigation (embedded (design measures), standard practice, and any additional mitigation measures) are in place before assessing the effects. This is in accordance with guidance from the Institute of Environmental Management and Assessment (IEMA) as part of preparing a proportionate assessment (IEMA, 2024).

18.2 Residual Likely Significant Effects during Construction

18.2.1 Table 18.1 summarises the predicted likely significant effects during construction.

Table 18.1 Likely significant effects during construction

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
ES Chapter 6: Agriculture and Soils (document reference 6.6)		
Best and most versatile (BMV) land loss (Agricultural Land Classification Grades 1, 2 and 3a) from agricultural productivity.	No additional mitigation measures proposed.	**Temporary major adverse.**
Temporary negative effects on soil resource, function and handling.	The Outline Soil Resource Plan included within the Outline Code of Construction Practice (CoCP) (Appendix C, document reference 7.2) contains mitigation measures for soil handling, storage, and reinstatement.	**Temporary major adverse.**
ES Chapter 7: Air Quality (document reference 6.7)		
No likely significant effects identified in the ES.		
ES Chapter 8: Ecology and Biodiversity (document reference 6.8)		
No likely significant effects identified in the ES.		
ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)		
No likely significant effects identified in the ES.		
ES Chapter 10: Health and Wellbeing (document reference 6.10)		
No likely significant effects identified in the ES.		

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
ES Chapter 11: Historic Environment (document reference 6.11)		
Predicted likely significant effect on 157 designated heritage assets due to changes in their settings that affect their values during the construction phase of the Project.	Standard construction mitigation would be adopted as detailed in the Outline CoCP (document reference 7.2). Changes to the setting would be temporary and would be reversed once the construction phase is completed. No additional mitigation measures are proposed during the construction phase as any measures designed to lessen the visual impact of the Project would be of a scale that would visually adversely alter the setting of the asset.	**Temporary moderate adverse.**
Predicted likely significant effect on 76 non-designated heritage assets due to changes in their settings that affect their values or due to physical impacts during the construction phase of the Project.	Standard construction mitigation would be adopted as detailed in the Outline CoCP (document reference 7.2). Changes to the setting would be temporary and would be reversed once the construction phase is completed. No additional mitigation measures are proposed during the construction phase as any measures designed to lessen the visual impact of the Project would be of a scale that would visually adversely alter the setting of the asset.	**Temporary moderate adverse** due to impacts through change to setting**.** **Permanent moderate adverse** due to physical impacts.

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
	For physical impacts archaeological investigation and recording prior to the construction phase would be undertaken as detailed in the Outline Archaeological Mitigation Strategy and Outline WSI (document reference 7.5).	
ES Chapter 12: Hydrology, Land Drainage and Flood Risk (document reference 6.12)		
No likely significant effects identified in the ES.		
ES Chapter 13: Landscape and Visual (document reference 6.13)		
Significant adverse landscape effects during construction are predicted for all of the Landscape Character Types (LCTs) and Landscape Character Areas (LCAs) which would be directly affected by construction activity within the Order Limits of the Project. These significant effects are related to the introduction of construction activity and equipment, including the loss of some landscape features including farmland and field boundary vegetation. Significant effects are also anticipated for some LCAs and LCTs outside of the Order Limits, up to a distance of approximately 1.5 km. These significant effects are related to the perception of construction activity and the effect this has on identified key characteristics of the landscape.	No additional mitigation measures proposed.	**Major, moderate-major or moderate adverse** effects on landscape character within 42 LCTs/LCAs.

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
Significant adverse effects during construction are predicted for visual receptors (residents, recreational receptors and road users) within all of the Visual Receptor Areas (VRAs) that would be directly affected by construction activity within the Order Limits. These significant effects are related to the introduction of construction activity into close to medium distance views. Significant effects are expected to extend up to approximately 1.5 km in some instances, for example where there are open, elevated and/or wide views towards construction activity. In some VRAs significant effects would be more contained, for example where views of construction activity would be filtered and screened by vegetation or topography.	No additional mitigation measures proposed.	**Major or moderate adverse** effects on visual receptors within 76 VRAs
Effects on special qualities within Dedham Vale National Landscape (an Area of Outstanding Natural Beauty): • *'Iconic lowland river valley associated with the artist John Constable RA, the views he painted are still recognisable today'* • *'A sense of relative tranquillity'.*	No additional mitigation measures proposed.	**Major adverse.**
Effects on special qualities within Dedham Vale National Landscape: • *'Valley bottom grazing marshes with associated drainage ditches and wildlife'* • *'Naturally functioning River Stour with associated tributaries, meres and historic river management features'.*	No additional mitigation measures proposed.	**Moderate adverse.**
ES Chapter 14: Noise and Vibration (document reference 6.14)		
Construction traffic noise on Bentley Road.	No additional mitigation measures proposed.	**Large adverse magnitude, major adverse.**

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
ES Chapter 15: Socio-economics, Recreation and Tourism (document reference 6.15)		
Temporary acquisition of land from the Paxman's Angling club, Porters Farm, camping area of Ardleigh Caravan and Camping Park, and Orsett Golf Course.	Mitigation measures set out in the Outline CoCP (document reference 7.2) and Outline Construction Traffic Management Plan (document reference 7.3), access to the angling club would be maintained with managed period disruption.	**Temporary, short term, moderate adverse.**
Temporary land take from Essex International Jamboree.	No additional mitigation proposed.	**Temporary, short term, major adverse.**
Permanent acquisition of land from the entire extent of the angling club (fishing lake north-west of Ardleigh) to construct the proposed pylon and overhead line.	No additional mitigation proposed.	**Permanent, long-term, moderate adverse.**
Temporary acquisition of land from the southern section of the Angling Lake West of Basildon for the purposes of overhead line construction and third-party work (i.e. UK Power Networks (UKPN) dismantling works).	No additional mitigation proposed.	**Permanent, long-term, moderate adverse.**
The proposed construction of overhead lines is not likely to comply with the recommended clearance parameters for airstrips, and therefore, a permanent closure of the Chase Farm Airstrip facility is anticipated.	No additional mitigation proposed.	**Permanent, long-term, moderate adverse.**
Temporary closure and diversion resulting in over 500 m increase in journey length of eight Public Rights of Way (PRoW) (footpaths and bridleway) within Mid Suffolk, Colchester, Chelmsford and Brentwood.	No additional mitigation proposed.	**Temporary, short-term, moderate adverse.**
ES Chapter 16: Traffic and Transport (document reference 6.16)		

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
During peak construction activity, 12 Primary Access Routes (PARs) would experience increased volume of traffic, leading to driver delay.	Transport Assessment (document reference 7.11) sets out measures to be implemented during construction to manage traffic flows.	**Temporary moderate or large adverse.**
During peak construction activity, 12 PARs would experience increased volume of traffic, leading to public transport passenger delay.	Transport Assessment (document reference 7.11) sets out measures to be implemented during construction to manage traffic flows.	**Temporary moderate or large adverse.**
Nine PARs where effects on pedestrian, cyclist and horse-rider amenity could arise due to changes in traffic through the construction phase.	Transport Assessment (document reference 7.11) sets out measures to be implemented during construction to manage traffic flows.	**Temporary, short-term moderate or large adverse.**
ES Chapter 17: Cumulative Effects (document reference 6.17) – Intra-Project Cumulative Effects		
A number of PRoWs, cycle routes and minor roads across all Project Sections would be affected during construction, in terms of access/severance of routes, delay in journey time, noise and visual effects, fear and intimidation.	No additional mitigation proposed.	Owing to the significance of visual impacts within 500 m of the Order Limits, and as further mitigation is unlikely to be practicable, it is anticipated that the residual cumulative effect of visual and noise amenity effects with access and delay effects would lead to a **significant** intra-project cumulative effect on pedestrians, cyclists and horse riders.
ES Chapter 17: Cumulative Effects (document reference 6.17) – Inter-Project Cumulative Effects		
Cumulative Effects Assessment (Stage 4)		

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
Agriculture and Soils The Project has a major adverse effect on its own due to permanent loss of BMV land, therefore any further loss of BMV land associated with the shortlisted other developments would be cumulatively significant. As effects relate to the permanent loss of agricultural land there are no additional mitigation measures that could be adopted to reduce effects.	No additional mitigation proposed.	Based on the data available on the other developments it was determined that inter-project cumulative effects on agriculture and soils receptors within the areas surrounding the Project would be **significant** during construction.
Air Quality – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Ecology and Biodiversity – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Contaminated Land, Geology and Hydrogeology – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Health and Wellbeing – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Historic Environment Based on the data available on the other developments it was determined that inter-project cumulative effects on designated heritage assets within the areas surrounding the Project would be significant during construction. The inter-project cumulative assessment identified three other development that would result in significant adverse cumulative effects with the Project.	No additional mitigation proposed.	The inter-project cumulative assessment identified three other development that would result in **significant adverse** cumulative effects with the Project. This would affect one scheduled monument, and one grade II listed building, which would experience **moderate adverse and significant** cumulative effects during construction.
Hydrology, Land Drainage and Flood Risk – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Landscape and Visual		
The construction and operation of the Bramford to Twinstead new double circuit electricity transmission network reinforcement has the potential for significant inter-	No additional mitigation proposed.	**Major adverse.**

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
project effects on both landscape and visual receptors within the Zone of Influence (ZOI) during the construction of the Project.		
The Lower Thames Crossing project has the potential for significant inter-project effects on both landscape and visual receptors within the ZOI during the construction of the Project.	No additional mitigation proposed.	**Major adverse.**
The Chelmsford North East Bypass has the potential for major adverse and significant inter-project effects on both landscape and visual receptors within the ZOI during construction.	No additional mitigation proposed.	**Major adverse.**
A large number of significant landscape and visual effects associated with the Project have been identified, as reported in Chapter 13: Landscape and Visual (document reference 6.13). These are due to the size and scale of the Project during the construction phase. Based on the data available on the other development, the assessment identified 47 shortlisted other development with the potential to contribute to significant inter-project effects on landscape and visual receptors during construction. The assessment identified 44 shortlisted other development with the potential to contribute to moderate adverse significant inter-project effects for landscape and visual receptors during construction.	No additional mitigation proposed.	**Moderate adverse.**
Noise and Vibration – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Socio-economics, Recreation and Tourism – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Assessment of Inter-Project Cumulative Effects from Clusters of Other Development (Stage 5)		
Agriculture and Soils		

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
Loss of BMV agricultural land and soil resource during construction from all shortlisted projects in the inter-project cumulative effects assessment.	No additional mitigation proposed.	**Major adverse.**
Landscape and Visual		
Effects on LCA B1: Tas Tributary Farmland resulting from other developments DCO1, DCO6, SN3, SN19, SN24, SN27 and SN47. During construction there would be effects on the landscape through the introduction of construction activity relating to the Project and other developments, should they be built at the same time.	No additional mitigation proposed.	**Moderate adverse.**
Effects on LCA D1: Wymondham Settled Plateau Farmland from other developments SN3 and SN26. During construction there would be effects on the landscape through the introduction of construction activity relating to the Project and other developments, should they be built at the same time.	No additional mitigation proposed.	**Moderate adverse.**
Effects on Rolling Valley Farmlands and Furze LCT and Ancient Plateau Claylands LCT (Waveney Valley area) from other developments BMS44, BMS63 and BMS69. During construction there would be effects on the landscape through the introduction of construction activity relating to the Project and other developments, should they be built at the same time.	No additional mitigation proposed.	**Moderate adverse.**
Effects on Ancient Plateau Claylands LCT and Rolling Valley Farmland LCT (Bramford Substation area) from other developments DCO2, BMS31, BMS42, BMS45, BMS52, BMS68 and BMS70. During construction there would be effects on the landscape through the introduction of construction activity relating to the Project and other developments, should they be built at the same time.	No additional mitigation proposed.	**Moderate adverse.**

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
Effects on Bromley Heaths LCA from other developments DCO8, DCO9, ECC27, T3 and T17. During construction there would be effects on the landscape through the introduction of construction activity relating to the Project and other developments, should they be built at the same time.	No additional mitigation proposed.	**Major adverse.**
Effects on LCA B1: Central Essex Farmland from other developments B8, B42, CH17, CH18, CH24, CH26, CH28, ECC13, ECC19 DCO13. During construction there would be effects on the landscape through the introduction of construction activity relating to the Project and other developments, should they be built at the same time.	No additional mitigation proposed.	**Moderate adverse.**
Effects on LCA C5: Chelmer Valley from other development CH3, ECC13 and ECC19. During construction there would be effects on the landscape through the introduction of construction activity relating to the Project and other developments, should they be built at the same time.	No additional mitigation proposed.	**Moderate adverse.**
Effects on LCA D2: Brentwood Hills from other development A3 (BrBC), A5 (BrBC), A11 (BrBC), BA13, BR2, BR5 and BR11. During construction there would be effects on the landscape through the introduction of construction activity relating to the Project and other developments, should they be built at the same time.	No additional mitigation proposed.	**Moderate adverse.**
Effects on LCA 13: Dunton Settled Claylands from other development BA6, BA13, BA20, BA24. During construction there would be effects on the landscape through the introduction of construction activity relating to the Project and other developments, should they be built at the same time.	No additional mitigation proposed.	**Moderate adverse.**
Effects on LCA H1: East and West Tilbury Open Undulating Farmland from other developments DCO3, TH12, TH18,	No additional mitigation proposed.	**Major adverse.**

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
TH22, TH30 and TH40. During construction there would be effects on the landscape through the introduction of construction activity relating to the Project and other developments, should they be built at the same time.		
Effects on visual receptors within VRA A1 Swardeston from other development DCO1, DCO6, SN27 and SN47. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA A2 Stoke Holy Cross from other developments DCO1, DCO6, SN3, SN24, SN27 and SN47. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA A3 Mulbarton and Wreningham from other developments SN3, SN26 and DCO6. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA B1 Wortham from other developments BMS44 and SMB69. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA B12 Elmsett from other developments DCO2, BMS31, BMS42, BMS52 and BMS68. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Major adverse.**

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
Effects on visual receptors within VRA B13 Somersham from other developments BMS45 and BMS70. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Major adverse.**
Effects on visual receptors within VRA C13 Little Bromley from other development DCO8, DCO9 and T3. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	additional	**Moderate adverse.**
Effects on visual receptors within VRA E2 Rivenhall from other developments B8, B13 and B44. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA E4 Silver End from other developments ECC35, B8 and B42. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA F2 Peverel's Farm from CH24, CH26, ECC13, ECC19 and DCO13. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA F4 Little Waltham from other developments CH17 and CH24. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Major adverse.**

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
Effects on visual receptors within VRA G4 Ingrave and Herongate from other developments BA13, BR2 and A3 (BrBC). During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA G6 Basildon from receptors BA6 and BA24. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA H6 Southfields from other developments TH30, TH40 and DCO3. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Major adverse.**
Effects on visual receptors within VRA H7 Linford from other developments TH22, TH30, TH40 and DCO3. During construction there would be effects on visual amenity through the introduction of construction activity relating to the Project and other developments.	No additional mitigation proposed.	**Major adverse.**

18.3 Residual Likely Significant Effects during Operation (and Maintenance)

18.3.1 Table 18.2 summarises the predicted likely significant effects during operation (and maintenance).

Table 18.2 Likely significant effects during operation (and maintenance)

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
ES Chapter 6: Agriculture and Soils (document reference 6.6)		
Loss of one or more soil functions due to the high sensitivity of BMV land. Irreversible loss of approximately 172.7 ha of BMV agricultural land required for permanent footprint of the foundations of the pylons, substations, Cable Sealing End (CSE) compounds and any permanent access routes.	No additional mitigation measures proposed.	**Permanent major adverse.**
ES Chapter 7: Air Quality (document reference 6.7)		
No likely significant effects identified in the ES.		
ES Chapter 8: Ecology and Biodiversity (document reference 6.8)		
No likely significant effects identified in the ES.		
ES Chapter 9: Contaminated Land, Geology and Hydrogeology (document reference 6.9)		
No likely significant effects identified in the ES.		
ES Chapter 10: Health and Wellbeing (document reference 6.10)		
No likely significant effects identified in the ES.		
ES Chapter 11: Historic Environment (document reference 6.11)		
Predicted likely significant effect on 41 designated heritage assets due to changes in their settings that affect their values during the operational (and maintenance) phase of the Project.	No additional mitigation measures are proposed during the operation phase as any measures designed to lessen the visual impact of the Project would be of a scale that would visually adversely alter the setting of the asset.	**Permanent moderate adverse.**

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
Predicted likely significant effect on 29 non-designated heritage assets due to changes in their settings that affect their values during the operational (and maintenance) phase of the Project.	No additional mitigation measures are proposed during the operation phase as any measures designed to lessen the visual impact of the Project would be of a scale that would visually adversely alter the setting of the asset.	**Permanent moderate adverse.**
ES Chapter 12: Hydrology, Land Drainage and Flood Risk (document reference 6.12)		
No likely significant effects identified in the ES.		
ES Chapter 13: Landscape and Visual (document reference 6.13)		
At Year 1 of operation, there would be significant landscape effects for most of the LCAs and LCTs which would be directly affected by the introduction of an overhead line, CSE compound or substation/substation extension. Significant effects would also extend to the surrounding landscape, up to a distance of approximately 1.5 km. There would also be significant landscape effects along the route of the sections of underground cable, where reinstated vegetation would still be immature. By Year 15, these effects would reduce due to maturing of the reinstatement planting which would integrate the areas previously used for construction, into the landscape (noting that trees would not be replanted over the cable route). Significant effects relating to the proposed overhead line would remain.	No additional mitigation measures proposed.	**Major, moderate-major or moderate adverse** effects on landscape character within 38 LCTs/LCAs.
At Year 1 of operation, there would be significant adverse visual effects related to the introduction of the proposed overhead line, CSE compounds, substations or substation extensions into close to medium distance views on visual receptors within most of the VRAs. By Year 15 of operation, effects on some visual receptors in proximity to CSE	No additional mitigation measures proposed.	**Major or moderate adverse** effects on visual receptors within 71 VRAs.

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
compounds, substations and substation extensions would reduce as a result of landscape mitigation within Environmental Areas, although effects in relation to the proposed overhead line would remain. For visual receptors within VRAs along the proposed underground cable alignment, there would also be significant adverse effects at Year 1 relating to the loss of vegetation. By Year 15 of operation, effects on visual receptors along the proposed underground cable would reduce to not significant, as reinstated planting would restore views to be similar to baseline levels (noting that trees would not be replanted over the cable route).		
ES Chapter 14: Noise and Vibration (document reference 6.14)		
No likely significant effects identified in the ES.		
ES Chapter 15: Socio-economics, Recreation and Tourism (document reference 6.15)		
Visible pylons and overhead lines would have visual effect on Ardleigh Caravan and Camping Park.	No additional mitigation proposed.	**Permanent long-term, moderate adverse.**
Permanent closure of fishing lake north-west of Ardleigh and angling lake west of Basildon due to a 30 m angling exclusion zone for safety.	No additional mitigation proposed.	**Permanent long-term, moderate adverse.**
Two pylons located within the field likely to affect the operation of the event at the Essex International Jamboree.	No additional mitigation proposed.	**Permanent long-term, major adverse.**
The proposed construction of overhead lines is not likely to comply with the recommended clearance parameters for airstrips, and therefore, a permanent closure of the Chase Farm Airstrip facility is anticipated.	No additional mitigation proposed.	**Permanent, long-term, moderate adverse.**

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
ES Chapter 16: Traffic and Transport (document reference 6.16)		
No likely significant effects identified in the ES.		
ES Chapter 17: Cumulative Effects (document reference 6.17) – Intra-Project Cumulative Effects		
No likely significant effects identified in the ES.		
ES Chapter 17: Cumulative Effects (document reference 6.17) – Inter-Project Cumulative Effects		
Cumulative Effects Assessment (Stage 4)		
Agriculture and Soils The Project has a major adverse effect on its own due to permanent loss of BMV land, therefore any further loss of BMV land associated with the shortlisted other developments would be cumulatively significant. As effects relate to the permanent loss of agricultural land there are no additional mitigation measures that could be adopted to reduce effects.	No additional mitigation proposed.	Based on the data available on the other developments it was determined that inter-project cumulative effects on agriculture and soils receptors within the areas surrounding the Project would be **significant** during operation (and maintenance).
Air Quality – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Ecology and Biodiversity – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Contaminated Land, Geology and Hydrogeology – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Health and Wellbeing – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Historic Environment Based on the data available on the other developments it was determined that inter-project cumulative effects on designated heritage assets within the areas surrounding the Project would be significant during operation (and maintenance) of the Project. The inter-project cumulative assessment identified	No additional mitigation proposed.	The inter-project cumulative assessment identified three other development that would result in **significant adverse** cumulative effects with the Project. This would affect one scheduled monument, and one grade II listed building,

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
three other development that would result in significant adverse cumulative effects with the Project.		which would experience **moderate adverse and significant** cumulative effects during operation (and maintenance).
Hydrology, Land Drainage and Flood Risk – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Landscape and Visual		
The operation of the Bramford to Twinstead new double circuit electricity transmission network reinforcement has the potential for significant inter-project effects on both landscape and visual receptors within the ZOI during the operation (and maintenance) of the Project.	No additional mitigation proposed.	**Major adverse.**
The Lower Thames Crossing project has the potential for significant inter-project effects on both landscape and visual receptors within the ZOI during the operation (and maintenance) of the Project.	No additional mitigation proposed.	**Major adverse.**
The Chelmsford North East Bypass has the potential for moderate adverse and significant inter-project effects on both landscape and visual receptors within the ZOI during operation (and maintenance).	No additional mitigation proposed.	**Moderate adverse.**
A large number of significant landscape and visual effects associated with the Project have been identified, as reported in Chapter 13: Landscape and Visual (document reference 6.13). These are due to the size and scale of the Project during the operation (and maintenance) phase. Based on the data available on the other development, the assessment identified 32 shortlisted other development with the potential to give rise to inter-project cumulative effects during operation (and maintenance). The assessment identified 29 shortlisted other development with the potential to contribute to	No additional mitigation proposed.	**Moderate adverse.**

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
moderate adverse significant inter-project effects for landscape and visual receptors during operation (and maintenance).		
Noise and Vibration – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Socio-economics, Recreation and Tourism – No likely significant effects identified in the Inter-Project Cumulative Effects Assessment		
Assessment of Inter-Project Cumulative Effects from Clusters of Other Development (Stage 5)		
Agriculture and Soils		
Loss of Best Most Versatile (BMV) agricultural land and soil resource during construction and operation (and maintenance) from all shortlisted projects in the inter-project cumulative effects assessment.	No additional mitigation proposed.	**Major adverse.**
Landscape and Visual		
Effects on LCA B1: Tas Tributary Farmland resulting from other developments DCO1, DCO6, SN3, SN19, SN24, SN27 and SN47. During operation (and maintenance) there would be direct effects on the key characteristics of the landscape through the introduction of the Project and the other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on LCA D1: Wymondham Settled Plateau Farmland from other developments SN3 and SN26. During operation (and maintenance) there would be direct effects on the key characteristics of the landscape through the introduction of the Project and the other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on Rolling Valley Farmlands and Furze LCT and Ancient Plateau Claylands LCT (Waveney Valley area) from other developments BMS44, BMS63 and BMS69. During	No additional mitigation proposed.	**Moderate adverse.**

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
operation (and maintenance) there would be direct effects on the key characteristics of the landscape through the introduction of the Project and the other developments.		
Effects on Ancient Plateau Claylands LCT and Rolling Valley Farmland LCT (Bramford Substation area) from other developments DCO2, BMS31, BMS42, BMS45, BMS52, BMS68 and BMS70. During operation (and maintenance) there would be direct effects on the key characteristics of the landscape through the introduction of the Project and the other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on Bromley Heaths LCA from other developments DCO8, DCO9, ECC27, T3 and T17. During operation (and maintenance) there would be direct effects on the key characteristics of the landscape through the introduction of the Project and the other developments.	No additional mitigation proposed.	**Major adverse.**
Effects on LCA B1: Central Essex Farmland from other developments B8, B42, CH17, CH18, CH24, CH26, CH28, ECC13, ECC19, DCO13. During operation (and maintenance) there would be direct effects on the key characteristics of the landscape through the introduction of the Project and the other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on LCA D2: Brentwood Hills from other developments A3 (BrBC), A5 (BrBC), A11 (BrBC), BA13, BR2, BR5 and BR11. During operation (and maintenance) there would be direct effects on the key characteristics of the landscape through the introduction of the Project and the other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on LCA 13: Dunton Settled Claylands from other development BA6, BA13, BA20, BA24. During operation (and maintenance) there would be direct effects on the key	No additional mitigation proposed.	**Moderate adverse.**

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
characteristics of the landscape through the introduction of the Project and the other developments.		
Effects on visual receptors within VRA A1 Swardeston from other developments DCO1, DCO6, SN27 and SN47. During operation (and maintenance) there would be visual effects through the introduction of the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA A2 Stoke Holy Cross from other developments DCO1, DCO6, SN3, SN24, SN27 and SN47. During operation (and maintenance) there would be visual effects through the introduction of the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA A3 Mulbarton and Wreningham from other developments SN3, SN26 and DCO6. During operation (and maintenance) there would be visual effects through the introduction of the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA B1 Wortham from other developments BMS44 and SMB69. During operation (and maintenance) there would be visual effects through the introduction of the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA B12 Elmsett from other developments DCO2, BMS31, BMS42, BMS52 and BMS68. During operation (and maintenance) there would be visual effects through the introduction of the Project and other developments.	No additional mitigation proposed.	**Major adverse.**
Effects on visual receptors within VRA E4 Silver End from other developments ECC35, B8 and B42. During operation	No additional mitigation proposed.	**Moderate adverse.**

Description of Likely Significant Effect	Proposed Additional Mitigation	Residual Effect
(and maintenance) there would be visual effects through the introduction of the Project and other developments.		
Effects on visual receptors within VRA F2 Peverel's Farm from ECC13, ECC19 and DCO13. During operation (and maintenance) there would be visual effects through the introduction of the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA F4 Little Waltham from other developments CH17 and CH24. During operation (and maintenance) there would be visual effects through the introduction of the Project and other developments.	No additional mitigation proposed.	**Major adverse.**
Effects on visual receptors within VRA G4 Ingrave and Herongate from other developments BA13, BR2 and A3 (BrBC). During operation (and maintenance) there would be visual effects through the introduction of the Project and other developments.	No additional mitigation proposed.	**Moderate adverse.**
Effects on visual receptors within VRA H6 Southfields from other developments TH30, TH40 and DCO3. During operation (and maintenance) there would be visual effects through the introduction of the Project and other developments.	No additional mitigation proposed.	**Major adverse.**
Effects on visual receptors within VRA H7 Linford from other developments TH22, TH30, TH40 and DCO3. During operation (and maintenance) there would be visual effects through the introduction of the Project and other developments.	No additional mitigation proposed.	**Major adverse.**

Abbreviations

Abbreviation	Full Reference
BMV	Best and most versatile land
CoCP	Code of Construction Practice
CSE	Cable Sealing End
ES	Environmental Statement
IEMA	Institute of Environmental Management and Assessment
LCA	Landscape Character Area
LCT	Landscape Character Type
PAR	Primary Access Route
PRoW	Public Right of Way
SOAEL	Significant Observed Adverse Effect Level
UKPN	UK Power Network
VRA	Visual Receptor Area
ZOI	Zone of Influence

National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com