

Ardleigh Parish Council Response to National Grid Norwich to Tilbury Statutory Consultation July 2024

Main Response

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Part 1 Introduction and Overview

1. Objection to Norwich to Tilbury and proposed alternatives

1.1 Introduction

While accepting the need to move power from the North Sea to London, Ardleigh Parish Council objects to the National Grid Norwich to Tilbury (the project) proposal. This is based on the arguments set out in consultation responses in 2022 and 2023 by this Parish Council and by the Essex Suffolk Norfolk Pylons action group, whose submissions, including this Statutory Consultation, we endorse. We, therefore, continue to call for alternative options such as an offshore grid to be properly considered and then taken forward.

1.2 We warmly welcome the Government announcement on 25 July 2024 that there will be further investment in offshore wind energy. We have been frustrated by the piecemeal approach to date with numerous parallel consultations and apparent restrictions on providers working together. Short-term profit and targets seem to be prioritised, rather than the national interest or longer-term (and real) costs. We have raised such concerns in each of the earlier consultations, for example

'We support the calls for a strategic off-shore solution and continue to call on all parties (including off-shore windfarm providers, battery storage providers etc, Local Authorities and the Government) to work together and to update the regulatory framework, to enable a genuinely strategic and collaborative approach to the issue of energy supply and to ensure that any future consultations provide a full range of considered and costed options. Our experience of liaison with National Grid and other providers is that there seems little appetite for joined up strategic and collaborative working and we feel we are being 'fobbed off' in this regard. We support the work of our MP, Sir Bernard Jenkin and the OFFSET group of MPs in seeking a strategic offshore grid.' (Ardleigh Parish Council response to National Grid's Norwich to Tilbury Consultation Summer 2023 para1.11 our emphasis)

- 1.3 It is imperative that the new Government removes barriers to collaboration, and the assumptions in favour of pylons and other dated technology, to allow the development of an integrated offshore grid at the earliest possible opportunity.
- 1.4 Ardleigh Parish Council responded to the non-statutory consultations in 2022 and 2023, raising objections and concerns about the scheme and its impact on our community. We outlined flaws in the consultation process and asked for alternative options such as offshore grid to be considered and included in the consultation process. Despite this, consultation has been and remains inadequate; valid alternatives have not been presented and the harms of National Grid's preferred project significantly outweigh any benefits.

1.5 National Grid's Plans for Ardleigh

Ardleigh would be uniquely and profoundly adversely impacted by:

- a stretch of 220m wide construction swathe for undergrounding cables.
- Twenty one (21) x 50m high pylons, with overhead cabling connecting them
- The EACN substation of approximately 12 hectares (or the equivalent of c. 20 international football pitches).
- If the additional windfarm substations are included, the total area of the sites is approximately 42 hectares (or equivalent of 70 football pitches).
- The length of the construction swathe is approximately 3.9 km (2.4 miles) from Lamb Corner to the Substation.
- In addition, there will be approximately 2.5 km (2.2 miles) length of pylons surrounding the village and out to the A12.
- The overall swathe area covered is approximately 100 hectares, with an additional 50 hectares approximately for the pylons that go around the village.
- Pylons will run very close to the centre of the village and across the flat landscape adjacent to and highly visible from the Dedham Vale National Landscape.
- 1.6 This document seeks to address questions raised in the Norwich to Tilbury consultation and to

provide additional information, context and evidence to show the adverse harms which the proposals would cause within and around Ardleigh. We address the following questions (from Section D of the National Grid consultation) throughout this document:

- Proposed overhead line alignment.
- Proposed pylon locations.
- Proposed underground cable locations.
- Proposed East Anglia Connection Node (EACN) substation.
- Proposals for construction, including temporary and permanent access roads, tracks, compounds and associated requirements and further comments.
- 1.7 We also address the online question 18 'Is there anything else you would like us to consider as we finalise our proposals?' summarised below:
 - National Grid's proposals for Ardleigh are extensive. In fact, we consider that we will be the most blighted Parish. In particular, the location of the EACN (which is intended to connect offshore wind farms, North Falls and Five Estuaries, plus an interconnector making landfall in the Tendring peninsular, to the Norwich-Tilbury route) means that the centre of Ardleigh would be surrounded by new and unwelcome infrastructure. This infrastructure would be entirely avoidable if the EACN were not required, should connections be offshore and/or closer to where the power were needed.
 - We are certain that the proposals, if they go ahead, would adversely harm Ardleigh: its residents, businesses, visitors, landscape and environment for ever. That this is being proposed and rushed without proper consideration of alternatives is untenable.
 - We therefore continue to call for alternative options such as an offshore grid to be properly considered and then taken forward. This would include, but is not limited to, the removal of the EACN in Ardleigh.

1.8 **Proposed Alternatives**

We are strongly of the opinion that an Integrated Offshore Grid remains the only sensible long-term solution. This consultation process should be restarted and the public and representative bodies such as our Parish Council must be better included in the process.

Alternatives that need to be fully considered and consulted upon are:

- A fully integrated offshore grid.
- The EACN to be removed from Ardleigh and, if needed, to be located offshore or on a brownfield site in a coastal location.
- A subsea option which would include an alternative platform for Five Estuaries and North Falls. on one of the several brownfield sites situated on or near the coastline in the region.
- High-Voltage Direct Current (HVDC) from Norwich to Tilbury subsea. HVDC cables offer several
 benefits over traditional Alternating Current (AC) cables, particularly in specific contexts such as
 long-distance transmission or undersea cables. We note, however, that, as far as agricultural
 land is concerned, undergrounding is generally worse as it affects the land permanently all along
 the route and the damage to land drains will take decades to rectify.
- The alternative underground High Voltage Direct Current (HVDC), proposed by the Electricity System Operator, would cause dramatically less harm, reducing the amount of damage to the southern boundary, Ardleigh, the Colne Valley and is achievable at comparable cost. It also offers huge advantages along the entire route from Norwich to Tilbury through being much more efficient electrically.
- HVDC or HVAC undergrounding along a route (which should itself be subject to consultation on a alternative routes) to remove Pylons from Ardleigh if the EACN was not relocated.
- 1.9 A key element of our objection is that it is the siting of the proposed EACN which would lead to the proposed scale of infrastructure and associate adverse impact on Ardleigh. We, together with our MP and

Tendring District Council and many other Parishes within Tendring object to the siting of the EACN in Ardleigh.

- 1.10 Furthermore, there is an argument for the Dedham Vale to be avoided entirely. The damage to this National Landscape and its setting, even from underground AC cables, would be enormous and is inappropriate in a protected National Landscape. We believe that National Planning Policy would support this position (National Policy Statement for Electricity Networks Infrastructure (EN-5)) and if followed would inevitably lead to the EACN being sited in a different location.
- 1.11 Our Council acknowledges and supports the detailed objection made by our local MP, Sir Bernard Jenkin, in respect of the enormous harms to our parish from the transmission structure and particularly from EACN. These harms come in addition to other onerous changes/harms already being considered or underway for our rural parish from minerals excavation (sited on the Norwich to Tilbury route), Tendring Colchester Borders Garden Community, highways diversions and proposed industrial distribution centre.
- 1.12 Inextricably linked to the current Norwich to Tilbury proposals are the large-scale substations associated with the Five Estuaries Windfarm, the North Falls Windfarm and the Tarchon Interconnector, as the assumption in National Grid's plans is that these will all be located adjacent to the EACN. The cumulative impact of the three projects, and indeed any further development in the form of solar farms and battery sites, would irreversibly harm the parish on a historic scale and destroy its rural character. It should be considered by National Grid whether it is ever acceptable under any circumstances to change the character of an entire parish.
- 1.13 Several studies have raised serious questions around the need case for EACN. Not only is the timing and capacity of required transmission in doubt, but studies such as ESO & OCSS highlight other likely more viable routing options. We also question whether siting the Tarchon interconnector in Ardleigh would be in the national interest. All of these matters should be thoroughly investigated by National Grid as a matter of urgency at the pre-planning stage. A number of fully costed scenarios, in line with Treasure Green Book principles, recognising the different routing options and timing uncertainty around the need case for EACN, and thus transmission routing through Ardleigh, should be provided to all stakeholders.

Part 2 Harm Caused by Project

1. Harms overview and context

1.1 Introduction to this section

This section seeks to provide detailed, Ardleigh-specific information about the foreseeable adverse harms that the project would cause.

This includes harm to environment, habitat and species, landscape, public rights of way and green spaces, impact on residents' wellbeing, impact on businesses, agriculture and farming and well as a detailed section on historic environment and heritage which is presented separately.

1.2 More about Ardleigh

The Parish of Ardleigh stands on a flat gravel plain in open countryside. It comprises predominantly of agricultural land and retains a distinctly pastoral character and quality despite its proximity to the urban centre of Colchester. Ardleigh is a small rural Parish which largely comprise of good quality agricultural land, supported by dispersed farmsteads.

The main point of settlement is the historic nucleated village of Ardleigh which lies at the heart of the Parish. With other smaller hamlets (including Ardleigh Heath, Burnt Heath and Crockleford Heath) and farmsteads interspersing the wider rural area.

It is believed that the Parish has been settled in excess of 3000 years. Ardleigh village is defined in planning terms as a Smaller Rural Settlement. It sits at the lowest tier of the settlement hierarchy, where development is anticipated to be modest in both scope and scale. The Parish of Ardleigh is predominantly occupied by agricultural land uses and this is reflected in the statistically significant proportion of working residents employed in the industries of agriculture, forestry and fishing.

Since 1981, a substantial proportion of Ardleigh village has been formally designated as a Conservation Area. Significantly, the Parish also contains the remains of a later Bronze Age urnfield cemetery which was designated a Scheduled Ancient Monument in 1976 (list entry no. 1002146).

Ardleigh Reservoir, which lies to the south-west of Ardleigh village, is a notable landscape feature, spanning almost 50 total hectares to the south-west of Ardleigh village. The reservoir was created in the 1970s and supplies the area with potable drinking water as well as supporting various recreational activities.

Proposed Overhead Lines cross the "Ardleigh Valley System" see Local Character Assessment 6B. Dedham Vale National Landscape is located immediately to the north of the Parish, hence large parts of Ardleigh contribute to the setting of this Area of Outstanding Natural Beauty Paragraph 176 of the NPPF provides that: 'Great weight should be given to conserving and enhancing landscape and scenic beauty in Areas of Outstanding Natural Beauty' and that 'development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas'. National Grid's proposal, as it crosses the Parish of Ardleigh, will adversely visually affect the Dedham Vale National Landscape.

There are two Sites of Special Scientific Interest (SSSIs) in Ardleigh: Ardleigh Gravel Pit SSSI TM053280 and Bullock Wood TM019278.

In conjunction with Essex Wildlife Trust, Tendring District Council has identified over 100 Local Wildlife Sites (LoWS) in Tendring, 11 of which are in the Parish of Ardleigh. Ancient Woodlands are areas of woodland identified by Natural England as having had continuous woodland cover since 1600 AD resulting in the survival of certain rare plants and animals and are thereby afforded special protection. Ancient Woodland is a form of Irreplaceable Habitat. Local Wildlife Sites are areas of land with significant wildlife value which provide important wildlife refuges and a green infrastructure network. They are worthy of nature conservation and protected by the Local Plan.

The Local Plan also identifies a number of Safeguarded Open Spaces throughout Ardleigh and affords these additional protection against development. In addition, the emerging Ardleigh Neighbourhood Plan allocates new Local Green Spaces for protection.

2. Environment, habitat and species

2.1 Summary of Impact on Ardleigh environment and habitats

The proposed plans will have a lasting detrimental impact on the Parish, its village & hamlets and will result in the damage and permanent loss of prime agricultural land and ecological habitats. No amount of biodiversity net gain will mitigate against this loss. Noise and light pollution from the construction phase and permanence of pylons, their cables and three (or more) substations, will adversely affect wildlife on a permanent basis.

The topography of the area is flat, and it is impossible for screening to hide pylons, likely to be seen for many miles, including from within and towards the Dedham Vale National Landscape.

The pylons visible from the National Character Landscape will clearly act as a detractor from the relative tranquillity that can be experienced within it and will impact on the protected views looking towards the National Landscape.

It is clear that the proposals now being advanced have not taken into account the "Guidelines for Landscape and Visual Impact Assessment" (Third Edition) prepared by the Landscape Institute and Institute of Environmental Management and Assessment. As such, it seems that no detailed (if any) regard has been paid in respect of undertaking a proper assessment of the impacts of the proposals on the NCL and settlement at Ardleigh. Had these guidelines been considered and followed in preparing an LVIA, it is clear that this proposal would be found to be seriously flawed.

In addition, para 176 of the NPPF provides that:

"Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas and should be given great weight in National Parks and the Broads. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated area."

The PPG "National Environment" provides (at para 042 Ref ID 8-042-20190721)

"How should development within the setting of National Parks, the Broads and Areas of Outstanding Natural Beauty be dealt with? Land within the setting of these areas often makes an important contribution to maintaining their natural beauty, and where poorly located or designed development can do significant harm. This is especially the case where long views from or to the designated landscape are identified as important, or where the landscape character of land within and adjoining the designated area is complementary. Development within the settings of these areas will therefore need sensitive handling that takes these potential impacts into account."

Tendring District Council Landscape Character Assessment Vol. 2 Page 54 and 55 6B: Ardleigh Valley System: Guidance:

The overall strategy should be to maintain the sense of remoteness of the Ardleigh Valley System with their sparse settlement pattern of small hamlets sheltered within woodland.

Narrow rural lanes are a feature of the valley. Road widening, kerbing, lighting, etc would produce a more urban character.

Conserve the deciduous ancient woodland within the valleys as a setting to buildings and ensure any new developments retain/enhance the wooded context through appropriate planting.

We see no evidence of sufficient consideration of these matters as the proposals by National Grid have developed.

2.2 Ardleigh's landscape and Habitat including reservoirs

The Parish of Ardleigh has diverse habitat from agriculture, horticulture and viticulture to paddocks, reservoirs, woodlands, hedges, heathland and ancient tracks and pathways.

All the local Ardleigh habitats report an abundance of wildlife. According to the Cornell Lab of Ornithology's eBird web portal 119 species of bird have been recorded at Ardleigh Reservoir, making it a very significant bird 'hotspot'. Data from Essex Bird Watching Society indicates that 60 different species were observed at Ardleigh Reservoir last year (2023). There are active bat populations (ref: Report on Ardleigh Cemetery Conservation Area 06.07.24 Common Pipistrelle and Soprano Pipistrelle identified feeding), as well as deer, badger, fox and hedgehogs. Anglers and wildlife alike will be severely disrupted, disturbed and permanently affected by the construction of pylons, overhead cables, noise and on-going maintenance.

There are several farm reservoirs, as well as Ardleigh Reservoir - managed by Anglian Water and Affinity Water. This is a 49-hectare waterscape, constructed in the valley of the Salary Brook and serves as a water supply source for north Essex. It is additionally used for recreational activities such as sailing and angling ("for more information see https://www.fishe.net/essex/fisheries/ardleigh.php South East Fishery Guide) in a peaceful setting and has an abundance of wildlife. Anglers and wildlife alike will be severely disrupted, disturbed and permanently affected by the construction of pylons, overhead cables, noise and on-going maintenance.

All of these habitats report an abundance of wildlife, including: breeding & nesting site for owls, buzzards, hawks, kestrel, swans, great crested grebes, little grebes, coots, moorhens, ducks, cormorants, herons, swallows, cuckoo, blackcap, chiffchaff, long-tail tits, great tits, blue tits, greenfinches, goldfinches, chaffinches, goldcrests, skylarks, thrush and blackbirds and wagtails. There are active bat populations, as well as deer, badger, fox and hedgehogs.

All around the Parish there are ancient trees, woodlands and hedgerows. Recent evidence from an arboriculturist has found that Ash trees, on a site near to the Cable Swathe and **Pylons TB08 – TB09**, have regenerated after Ash Dieback disease, having produced a defence mechanism to resist the pathogens. These types of trees should be preserved for the future heritage of the landscape. Hedge lines near to affected sites are classed as ancient and ideal habitats for much wildlife: bats in particular.

The National Grid proposals would damage the environment due to extensive habitat loss, including the decimation of ancient trees, woodland and hedgerows, disturbance of habitat during construction and ongoing noise and light pollution. In addition, there is the known issue of bird fatalities caused, by striking powerlines in an area where there are resident swan populations as well as bird migration. More information on harm to birds is outlined below.

2.3 Harm to Birds

Ardleigh Parish Council objects strongly to the harm that will be caused to the wildlife and bird population that exists in abundance. There will be an unprecedented and unacceptable volume of pylon cabling that will wrap around the village, its farmland and its reservoirs causing untold harm. From Pylon TB001 to TB021, 50m high, carrying an array of 24 cables between each, stretching up to 3 miles across landscape that is flown over by migratory and native birds and bats.

It is well-documented and acknowledged in the Government's draft National Policy Statement EN-5, that many birds are killed or injured by flying into overhead power lines. Pylons carrying such lines near the coast pose a particular hazard in spring and autumn, when tens of thousands of birds migrate to and from the UK. However, pylons and overhead lines sited inland are also a potential hazard, especially when near rivers, between bodies of water, near arable fields where geese graze, and when they lie across the flight paths used by swans, wildfowl, gulls, waders and other birds. The potential for casualties and fatalities

increases with birds whose habit is to leave their daytime feeding grounds and fly to their nocturnal roosting areas.

It is undeniable, from the evidence presented, that many species of birds in East Anglia are at huge risk from the overhead lines proposed over 180km by National Grid (Norwich to Tilbury). There is significant data to show that birds of many species have been affected by power lines in the East of England and this should not be allowed to continue, especially by design. In Norfolk, Suffolk and Essex, Mute Swans and Barn Owls are high-risk species (BTO), with Kestrels, Grey Herons, Canada Geese and Black-headed gulls being the most numerous species to die in collision with power lines.

The East Atlantic Flyway, an important region for migratory birds, is one of seven sites to be put forward by the UK Government for UNESCO World Heritage status. The flyway, which covers an area of almost 1,300 km, brings together a coastal network of wetlands from RSPB Blacktoft Sands on the Humber Estuary to RSPB Wallasea Island, Essex, plus reserves along the River Thames. It is visited by millions of birds annually.

This is an area of coastal and hinterland habitats critical in the migration of around 1,000,000 birds between Eastern England, Western Europe, West Africa and southern Africa. The UNESCO proposal is spearheaded by the Royal Society for the Protection of Birds, due to its global significance. The destruction and/or degradation of existing habitats and the mortality risk to migrating birds is of considerable concern along the flyway. National Grid's own report acknowledges that 'Ardleigh Reservoir and gravel pits and large fields at Ardleigh, which are likely to be of value for a range of waterfowl'. iii

2.4 Noise Pollution

Noise pollution is known to affect all animal groups, with studies conducted on mammals, birds, amphibians, reptiles, fishes, and invertebrates (Sordello et al, 2020). Although intense noise can result in permanent hearing damage, and in some cases, death, this report will focus on the behavioral impacts of continuous noise, as these are more widespread. Four key mechanisms drive the behavioral effects of chronic noise exposure:

- Noise masks important sounds, including communication between individuals and other sounds, such as approaching danger.
- Noise distracts animals from extracting information from the environment.
- Noise can be perceived as a direct threat, thereby altering the behavioral responses of the animal.
- Noise can initiate states of chronic stress in animals.

Birds rely heavily on sound, making them the focus of many studies on the effects of noise pollution. The two main functions of bird song are to attract mates and defend territory. So, noise pollution can impact a bird's ability to reproduce. A study on great tits found that traffic noise harmed birds' reproductive success and reduced the number of chicks fledging. Although there was only a small difference for each bird.

Ardleigh Parish Council strongly objects to the adverse harm that excessive noise and light pollution will cause to not only the people who live in the area but also to the wildlife that exist there.

2.5 Harm to Bats roosting and hunting

Ardleigh Parish Council is very concerned about insufficient and incomplete bat surveys conducted and the lack of detailed information within the National Grid documents. Our residents tell us bats are numerous around the affected areas from Lamb Corner to the proposed substation and back across the village to beyond the A12. The Parish Council reject any proposed disturbance to these protected species. Ardleigh Parish Council would expect an extensive bat survey be conducted and for full data to be released from individual surveys within our Parish. Further data is needed across the whole affected area surveyed by qualified experts and at relevant times of the year.

2.6 Habitat, trees and hedgerows

National Grid's own documents claim in National Grid Preliminary Environmental Information Report (PEIR) Volume 1 Main Text:

- NG committed to 10% Biodiversity Net Gain (BNG). Deliver long term environmental improvements.
 Make a positive contribution to regional strategies. Facilitate collaboration and partnership with our communities and stakeholders.
- The Project will deliver an overall net improvement to biodiversity in the area through a combination of on-site and off-site mitigation.

Ardleigh Parish Council rejects this statement for several reasons:

- The construction of the pylons and pylon route will cut a swathe through the landscape around 220m wide (NG's own figures) over a distance of 5.9km. All vegetation including trees and hedgerows will be removed. Ardleigh is predominantly rural agricultural land with relatively small fields enclosed by ancient hedgerows that include many mature trees some of which are hundreds of years old. These hedgerows provide wildlife habitats and highways to connect to numerous priority habitats across the whole landscape within the Parish. Taking these away will cause immediate and lasting harm. It is impossible to replace these habitats that have taken decades to grow in anything less than a similar timescale.
- A 10% BNG is unrealistic and misleading. NG states the net improvement is a combination of on-site and off-site mitigation. There is no guarantee that any of this so called BNG would be within Ardleigh.
- The underground swathe is 220m wide over a distance of 3.9km. The same negative effect will occur as with Pylons except that due to the disturbance of the subsoil the vegetation regrowth will never be the same
- The substation footprint is 12ha or 20 international football fields. This is permanent and covered in concrete. Where is that going to be replaced in Ardleigh?
- The total loss of mixed hedgerows and trees in Ardleigh is estimated as a conservative 4.5km. No amount of net improvement to biodiversity can ever replace that which exists at present. The balance of loss of ancient and irreplaceable trees and hedges can never be replicated at least not for decades.
- All around the Parish there are ancient trees, woodlands and hedgerows. Recent evidence from an arboriculturist has found that Ash trees, on a site near to the Cable Swathe and Pylons TB08 TB09, have regenerated after Ash Dieback disease, having produced a defence mechanism to resist the pathogens. These types of trees should be preserved for the future heritage of the landscape. Hedge lines near to affected sites are classed as ancient and ideal habitats for much wildlife: bats in particular.

National Grid tell us that:

"Design of the substation and compounds will allow for landscape planting around CSE compounds and the new EACN Substation. This will reduce effects on views and landscape setting. This would also support BNG. Draft areas for landscape planting (and BNG) labelled 'Environmental Areas' are presented on Figure 4.1: Proposed Project Design in PEIR Volume II. Replacement planting would be undertaken at the earliest opportunity given the right planting season."

Our Parish Council rejects this statement since the size of the substation(s) and compounds cannot be hidden by planting. The number of trees and hedges can never be replaced to the type, age and height that exist now.

3. Landscape, Public Rights of Way and Green Spaces

3.1 Overarching National Policy Statement for Energy (EN-1)

Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate. iv

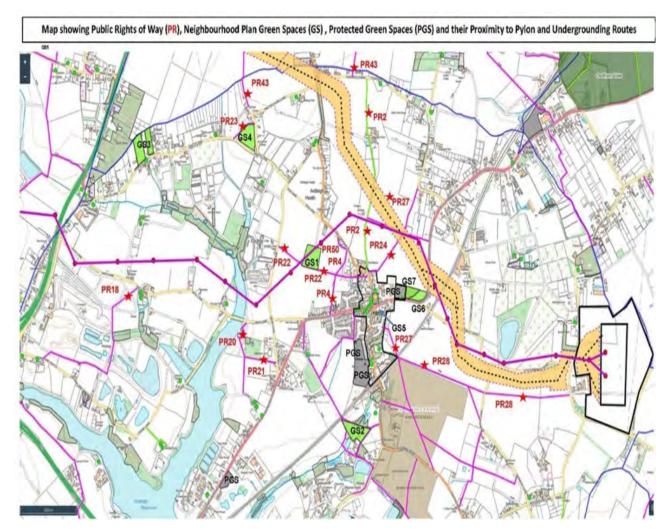
NG have failed to take this into consideration the topography of the land is such that the impact of 50m high Pylons is devastating to the landscape and surrounding areas. There is no mitigation proposed.

National Parks, the Broads and AONBs (now National Landscapes) have been confirmed by the government as having the highest status of protection in relation to landscape and natural beauty. Each of these designated areas has specific statutory purposes which help ensure their continued protection and which the Secretary of State should have regard to in their decisions.

The line of Pylons stretching from the EANC in Ardleigh to the western Parish boundary are less than 1.2km from the border of the Dedham Vale National Landscape due to the flat topography (witnessed elsewhere) the Pylons will be visible deep into the National Landscape. The EACN and Pylons should, preferably, be moved to a more sustainable offshore solution, or the cable buried using HVDC.

3.2 Proximity to Green Spaces

The planned cable swathe and pylon route goes near to, or across, Safeguarded Open Spaces: Recreation Ground, Millennium Green, Churchyard, Allotment and Cemetery as well as Local Wildlife Sites: Ardleigh Reservoir Wood and Grassland and Birch Wood. Also affected are Local Green Spaces, identified in Ardleigh Parish Council's Neighbourhood Plan, which is going to referendum shortly (expected 12 September 2024). The map below shows the existing and proposed Green Spaces in relation to the National Grid proposals.



During consultation for Ardleigh Neighbourhood Plan, Ref: https://ardleigh.website/our-plan the overwhelming majority of respondents told us that they valued the green spaces and rural feel of our Parish and did not wish to see further development. We did not ask directly about pylons but cannot conceive that 21 x 50m high pylons, cables, swathes for underground cabling and all associated infrastructure could be compatible with the aspiration to protect our rural setting. In the Plan there are new Local Green Spaces to further protect specific areas valued by our residents as places of beauty, tranquillity or local interest.

Despite National Grid acknowledging the existence of the Ardleigh Neighbourhood Plan there is no evidence that this been considered in relation to either the Local Green Spaces or the Safeguarded Open Spaces, even though key parameters such as draft Order Limits have now being defined. There is for example no reference to these valued spaces in documents such as PEIR Non-Technical Summary "Figure 1 - Non-Technical Summary - Environmental Constraints Plan, Page 13 of 25".

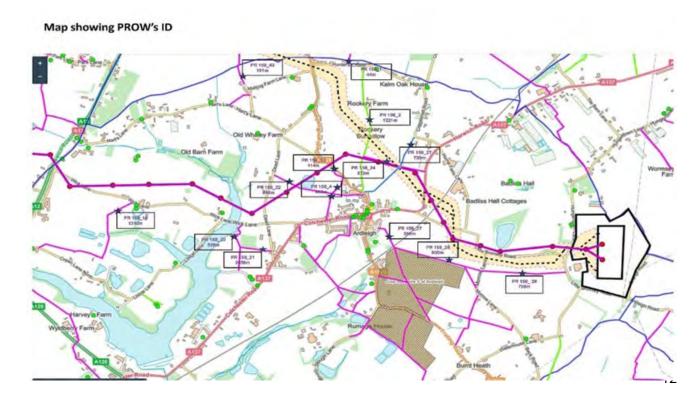
In section 4.13.22 of the 2023 Non-Statutory Consultation Feedback Report, 'Concern about the impact of the Project on the Ardleigh Neighbourhood Plan" is referenced. National Grid's response is stated as: "The relevant neighbourhood plans along the proposed route (including those produced by Ardleigh Parish Council) have all been identified along with other local and national planning policy. The Planning Statement, which will be submitted with the application for development consent, will set out how the Project has had regard to relevant planning policies, including those of emerging and adopted Neighbourhood Plans'.

This is too late in the process to address such issues as they need to be considered in the initial routeing.

3.3 Proximity to Public Rights of Way (PRoW)

There are a number of well-used footpaths which would be impacted by the proposals. More details can be found in the Essex County Council highways map^{vi} which is where the designations are taken from. Additional context on the popular footpaths in the parish is included in the Ardleigh Neighbourhood Plan^{vii}

The Essex Way is a Long Distance Path and passes close by to Ardleigh, through Dedham Vale National Landscape. The connecting footpath network in Ardleigh would be decimated by the scheme, noting that walkers stop off and explore locations along the route using the local paths. Sections of the Essex Way will also have views of the EACN and the OHLs. An example view is provided in "Figure No: 13.9.47b Viewpoint 3.19: Essex Way, Dedham Road" from "PEIR Volume II: Figures Part 17 of 27: Figures 13.9.43 - 13.9.50 - Wireline Visualisations". The infrastructure is some distance away in this image but even from this distance N2T would add to the wirescape visible from the Essex Way. It would also be more prominent than shown. Note that the representation in blue is not a suitable colour to represent the proposed infrastructure. The map below shows the PROW in relation to the National Grid proposals.



3.4 Key concerns and harms by location

Specific green spaces and how they will be harmed/ proximity to proposed NG infrastructure

Public Right of Way	Green Space	National Grid infrastructure
-	Glebe Land Corner	Pylons TB08 – TB12 and cabling
		plus Cable Swathe

Adverse Harm: This space comprises former glebe land (historically attached to the village church) that now appears as rough grassland, bordered by dense and mature hedgerows of some quality. The space is considered to provide a very important landscape function, marking the unofficial "entrance" to Ardleigh from the east. Its partial treed enclosure clearly distinguishes it from the wider open landscape and serves to signpost the transition from large-scale arable countryside to small scale rural settlement. In its current state, the site has clear biodiversity value and appears to support an abundance of butterflies and bees. It also assists to preserve the tranquillity and landscape qualities of the adjacent allotments and cemetery. Although it is no longer glebe land, it retains many of the undeveloped qualities that is would historically have held as glebe land and it continues to form part of the church's heritage setting. Its retention provides an evocative reminder of the ecclesiastical origins of this part of the Parish.

This space is being designated for the Cemetery extension and additional allotments and public open space for residents to enjoy.

Public Right of Way	Green Space	National Grid infrastructure
-	Harwich Road allotments	Pylons TB08 – TB12 and cabling plus Cable Swathe approx 50m
		away

Adverse Harm: The setting of the allotments would be harmed by pylons and cable swathe close by. As outlined in the Ardleigh Neighbourhood Plan: *The site comprises private allotments that are used by local residents to grow vegetables, flowers and keep poultry. Produce grown here is frequently sold to the local community. Overall, the allotments ... have a positive visual presence from the road on the approach to the village. Especially given modern concerns over food security and supply issues, these village allotments have considerable value to the local community.'*

It is the intention of the Parish Council to purchase this land for the future security of the allotments and Cemetery extension.

The tranquillity of the Cemetery, Allotments and extension to the Cemetery, will be adversely affected by construction traffic, noise and pollution and permanently blighted by the near sight of pylons TB09 and TB10.

Public Rights of Way	Green Spaces	National Grid infrastructure
Footpath Numbers FP129 8, 158 43 and 158 23 Malting Farm Lane to Harts Lane	Local Green Space 8/12/13 Woodlands attached to Birch Wood	Close to the Cable Swathe and in sight of Pylons TB11 – TB15 and cabling

Adverse Harm: These protected spaces would be harmed given the proximity to cables and pylons. More details of the spaces are given below.

Adjacent to Local Green Space 8/12/13 Woodlands attached to Birch Wood These rural footpaths are an ancient connection between Langham and Dedham and near to the old A12. They are well used by locals and FP129 8 will be obliterated by the cable swathe. The path will become impassible during construction. The views to the south of the path will be of Pylons TB011 to TB015 and at least 19 cables stretching between each.

Local Green Space 8/12 Woodlands attached to Birch Wood Space 8/12 comprises two small but dense sections of woodland located along the historic and picturesque Hart's Lane. The woodlands appear as

natural extensions of the adjacent Birch Wood which is a designated Local Wildlife Site. Their trees appear to be of some maturity and good quality. In common with the adjacent Birch Wood, the space supports a wide variety of wildlife. Birch Wood is identified to be suffering from piecemeal conversion to residential garden. Given this ongoing threat, the retention of these sections of adjoining woodland is considered to be all the more important for both landscape and biodiversity reasons. The sites also make a notable positive contribution towards the special rural and sylvan qualities of the historic Hart's Lane and the setting of nearby listed buildings.

Local Green Space 13 The space is a working apple orchard with a public footpath running along its boundary. Previously, the public footpath ran through the centre of the orchard, but part of the orchard was recently lost to residential use. Historically and for many generations, the surrounding area (Hart's Lane) was replete with working fruit orchards, however these uses have nearly all been lost. This space now comprises the last remaining veteran fruit orchard on Hart's Lane. It consequently provides an evocative and highly valuable reminder of the specific agricultural origins of this part of the Parish. The Woodland Trust also recognises that fruit orchards of this scale and nature are "biodiverse hotspots" - given the modern loss of all other fruit orchards on Hart's Lane, this last remaining space is likely to provide a highly valuable refuge for local wildlife and its retention is important.

Public Right of Way	Green Space	National Grid infrastructure
Footpath No's FB 158 50 From Dedham Road to FB 158 4. FB 158 4 From Dedham Road across the field to Colchester Rd. FB 158 22 from The Street to Dead Lane.	Local Green Space 3 Fishing Lake and Footpaths north of Colchester Road	Pylons TB13 and TB 14, cabling and haul roads, plus edge of cable swathe and views of other pylons and their cables (at least TB12, TB15 and likely others)

Adverse Harm: This is very close to the centre of Ardleigh, and all footpaths are heavily used and valued highly by residents. The impact of the haul road, pylons and cables will permanently destroy this public amenity space. This space to close to the main residential area of the village and the pylons will be near the school, residential streets, Health Centre, the Church and many businesses in the heart of the village. The disruption to the roads and access and egress from the village for many years will be an intolerable result of the proposed development. These pylons, cables and associated haul roads, etc. are unacceptable due to their proximity. The hedgerows, trees and fields are all established over hundreds of years and will never be reinstated to their current state. The reservoir itself is recognised for the amount of wildlife that has been seen there. This Local Green Space is identified by residents for protection via the Neighbourhood Plan- extract below.

Local Green Space 3 Fishing Lake and Footpaths north of Colchester Road

The site comprises public footpaths and a fishing lake. Parts of the site support beautiful, far-reaching public views to be had both across the arable landscape and back towards the settlement edge. These views are genuinely representative of the Landscape Character Area and largely unchanged since historic times. The space is emblematic of the historic (and, in other places, eroded) abrupt spatial relationship between the mediaeval nuclear village of Ardleigh and the surrounding working countryside. It has been used for recreational walking by villagers for hundreds of years. It provides the only glimpse of open countryside available from Colchester Road (within the built-up area of the village). The fishing lake is replete with local wildlife, including a variety of birds and bats. Given its proximity to the village centre, it is a surprisingly tranquil place with a perceptible sense of being far away from people and settlement. It is subject to regular recreational use by a local fishing club.

FB 158 22 will be cut across by a haul road and will have Pylons TB13 and TB 14 cutting across and have cables directly above. The fishing lake will also have cables cutting across.

Public Right of Way	Green Space	National Grid infrastructure
Footpaths FB 158 20 From Lodge	-	The views from both paths will
Farm Road to Wick Lane and 158		be blighted by construction
21 From Dead Lane to FB 158 20.		and views of
		pylons TB 12 – TB 17 and their
		cables.

Adverse Harm: FB 158 20 goes over fields next to Ardleigh Reservoir, a vineyard and a woodland.

FB 158 21 joins onto FB 158 20 alongside the Water Treatment works, designated nature area and woodland.

FB 158 21 will be intersected by a zone for construction operation and maintenance, rendering it impossible to use.

Public Right of Way	Green Space	National Grid infrastructure
Footpath 158 3 from Coggeshall Road to The Street	Close to Glebe Corner	Footpath 158 3 will look onto TB010 – TB012 and cables

Adverse Harm: Footpath 158 3 would have been an ancient track way through to the village joining at Coggeshall Road. It is regularly used by walkers and is easily accessible from the centre of the village. It provides easy access to the countryside. It views across Land Settlement Association sites as well as flat farmland. There are many ancient trees and hedgerows along the walk, and it comes close by to the boundary of the Cemetery. There are wonderful views across the flat land to the Church. This will be permanently spoilt by pylons and cables and during construction phase will become inaccessible due to it being designated a zone for construction, operation and maintenance. Thus, preventing a means of health and wellbeing for residents.

Public Right of Way	Green Space	National Grid infrastructure
Footpath 158 24 from the A137	Close to Glebe Corner	TB010 to TB012
to FB 128 2		Construction of the swathe,
		pylons and cables

Adverse Harm: Footpath 158 24 gives safe access from the A137 across to Rookery Cottage and walkers can do a circular walk from the centre of the village by using these footpaths and some pavements.

The cable swathe and pylon and cable construction is very close to this footpath and TB010 to TB012 will be close by. The construction of the swathe, pylons and cables will make this pathway inaccessible.

Public Right of Way	Green Space	National Grid infrastructure
Footpath 158 19 from Wick Lane (near to Wick Farm) to Crown Lane North.	Close to proposed County park-	Pylons TB018 – TB020 and cables pylon TB20 wil be on land designated for the Country Park close to a zone for permanent assets.

Adverse HARM: FB 158 19 will look onto Pylons TB018 – TB020 and cables and be close to a zone for permanent assets.

This footpath is currently disrupted by a large mineral extraction site and the construction of a new reservoir and public open space. Footpath 158 19 will be re-routed around the new country park. The new reservoir is expected to become a haven for wildlife, resident and migratory birds-and would be under threat should the NG proposals go ahead.

Public Right of Way	Green Space	National Grid infrastructure
Footpath 158 28 (and 29) from the railway line near the village to Morrow Lane and from Morrow Lane to Little Bromley		Pylons TB001 – TB010 and cables will be visible from this path The substation and associated construction will be visible.
Road. 158 29 joins into 28 in the field.		The corner of this field will be destroyed by the cable swathe, pylons and haul roads.

FB 128 28 1558m in length crosses the Scheduled Ancient Monument site showing Roman Pottery Kiln and Crop Marks and is accessed via the village. The view from Morrow Lane through the field and along the footpath towards the village centre is of irreplaceable value to those that walk the land and footpath.

FB 128 28 is a regularly used footpath and has long reaching views across a large field setting. There are numerous ancient trees and hedgerows along the way, as well as ancient and well-established woodland. Across the Little Bromley Road is the agricultural reservoir for the local fruit grower (See Peake Fruit submission). This contains many species of waterfowl and woodland birds and bats, as well as deer, fox and rabbit.

The footpath that goes from Morrow Lane to Little Bromley Road will be inaccessible during the construction phase of the plan.

See also Appendix A Consultation May 2024 - Walk to Footpath 28 14.05). This is photographic description of the area.

Public Right of Way	Green Space	National Grid infrastructure
Footpath No 158 12 – Long Road West to Hunters Chase		Pylons TB 10 – 12 and cables will be visible.
		Cable swathe

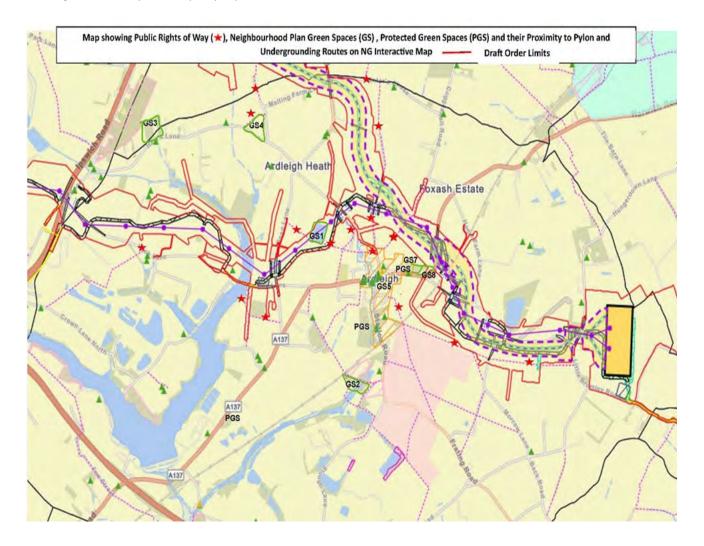
Adverse HARM: Cable swathe is close by to the entrance on Hunters Chase and will disrupt walkers. Hunters Chase will become impassible. This pathway is a link between Ardleigh and Dedham. This is an area of flat fields and ancient woodland and has been used for hundreds of years.

Public Right of Way	Green Space	National Grid infrastructure
Bridleway and Footpath No158 2 Hunters Chase to The Street	-	TB09 – TB14 and cables
The street		Cable swathe

Adverse HARM: Another area very close to the centre of Ardleigh Village and used heavily by walkers and residents. The cable swathe cuts across the footpath at Rookery Bungalow. Pylons TB011 and TB012 and cables will be directly above the footpath. The construction of both the cable swathe, pylons and cables will disrupt this regularly used path. Walkers, dog walkers, horse riders are frequent daily users of this path. It is easily accessible from The Street and gives direct access on to fields, open space and fresh air. There are uninterrupted views across the farmland, which is flat, from north to south and east to west. Views that will be permanently blighted by at least 6 x 50m high pylons and their cables: Part of this land was given to the Land Settlement Association during the 1930's. Reference: Foxash Story.pdf (wsimg.com) Many of these holdings have diversified into different types of horticulture, viticulture and catering, as well as car repairs. They provide rural employment opportunities. The field is bounded by ancient trees and hedges and to the east of the footpath is the boundary to the Cemetery, Allotments and Glebe Corner.

3.5 Overview Green spaces and Public Rights of Way

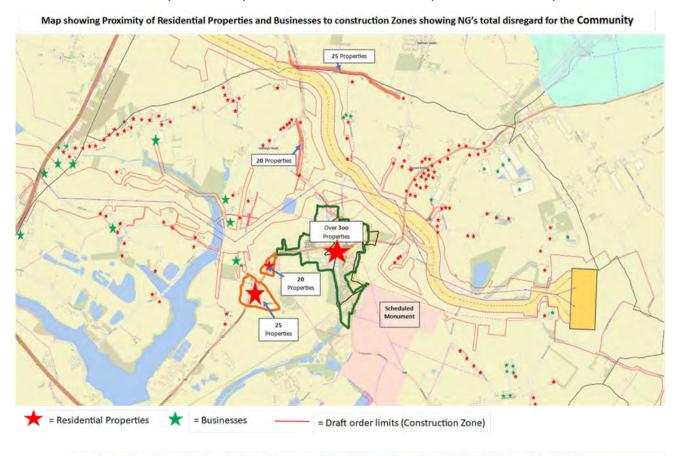
The map below shows all of the public rights of way, existing and emerging local green spaces within Ardleigh and their proximity to proposed National Grid infrastructure.



4 Impact on Ardleigh residents

4.1 Health and wellbeing and proximity to homes

As already stated, Ardleigh would have a total of 21 Pylons leading away from the (new) EACN substation, with 7 of those enclosing 180° round the heart of the village. There would be **Harm** to the character and essence of Ardleigh, to which the Parish Council object. The village would also have underground cables into the substation from the AONB. It will be devastated by 9.75km of construction works and permanent infrastructure around the village. The map below shows the proximity of residential properties to the proposed construction. Several residential and business properties are within the Draft Order limits (construction zones). Without doubt this is already having a huge effect on residents' health and wellbeing. The stress and uncertainty of their way of life and livelihood is unacceptable and extremely **harmful.**



= Parish Boundary (this is from the NG Interactive Map and is inaccurate, all stars are within the actual Parish Boundary)

Residents are fearful for the health of their children living and attending school where pylons curve round one side of the village, less than 500m from the school (some are planning to withdraw their children from the school which is a further **harm** to the character of the village). Extract from Health Protection Agency HPA (NRPB 2004) advice:...'the overall evidence for adverse effects of EMFs on health at levels of exposure normally experienced by the general public is weak. The <u>least weak</u> evidence is for the exposure of children to power frequency magnetic fields and childhood leukemia) (Our emphasis) viii

Our residents remain fearful of the potential future impact on the health of the future generation. The fear in itself is harmful. Electromatic fields are recognised as there are safety limits and measures in place. NG has stated that wires will hum and 'fizz' especially in damp weather and there are anxieties about health risks. The stress and fear caused by this is very real to residents and in itself very harmful.

The ecological impact and harm inflicted on Ardleigh by the project will be immeasurable. Running to and from the proposed EACN, loss of 192 hectares of mostly Grade 1 BMV farmland, is unacceptable. It is a severe **harm** to the parish, farmers, and UK food production at a time of increased food insecurity. The **harm** that will impact on our parish is unprecedented, due to the volume of proposed infrastructure works

being set down in one place, through undergrounding, pylons and the EACN substation.

4.2 Disruption expected

Noise levels and disruptions across the village will be constant for the project, sometimes 24 hours a day. This will have a detrimental effect on residents and their children, animals, and the environment. The WHO recommends that long-term exposure to noise from traffic should not exceed 53dB during the day-evening-night period and 45dB during the night to avoid adverse consequences on health. NG table 8.6 Static Construction Activities and Associated noise levels indicate the noise levels will exceed this.

Wick Lane is a locally known black spot for accidents and features heavily in the access plans, but the danger has not been recognised or acknowledged. As this would be used as a major access point for a vast number of construction vehicles this will increase the danger. Major **harm** will be caused by the sheer volume of the specialist vehicles required to transport the volumes of concrete, steel pylons, cable drums, excavation machines etc.

The reservoir (to west side of the village) and the surrounding trees and environment are vital for many bird species, both migratory, nesting and feeding. Proposed pylons going overhead will cause major **harm** and devastation.

It is a major **harm** that the whole area around the village will lose ancient hedgerows, trees and associated habitats for a wide range of wildlife. This can never be replaced. Wildlife will undoubtedly die, leading to an ecological disaster in terms of biodiversity and general **harm.**

4.3 Noise/vibration Pollution Harm to Human Health

The EU Environmental Noise Directive (<u>Directive 2002/49/EC</u> relating to the assessment and management of environmental noise) states that exposure to continuous environmental noise significantly affects physical and mental health and well-being. It can lead to:

- Annoyance.
- Stress reactions.
- Sleep disturbance.
- Negative effects on the cardiovascular and metabolic systems.
- Cognitive impairment in children.
- the school children attending the Primary School in Ardleigh will be in proximity to increased traffic noise and the installation of Pylons TB12 & TB13.

WHO (World Health Organisation) recommends that long-term exposure to noise from road traffic should not exceed 53dB during the day-evening-night period and 45dB during the night to avoid adverse consequences on health. ix

The baseline assessment desk-based study has been used for the noise study area using a 300m buffer from the Draft Order Limits and a 100m buffer for construction vibration impact. However, it is now clear that there will be houses right against the limits and therefore will be greatly impacted and harmed. A number of operations that 'may' take place outside core working hours (4.7.3 PEIR Vol 1 main text) will cause a great deal of disturbance, noise and harm. These operations would be ongoing for a great length of the project. We are especially concerned about the cumulative impacts of different noise sources during construction and operation, and of the disturbance caused by intermittent and unpredictable noise-as well as ongoing background noise.

4.4 Conclusion- health and wellbeing

The impact on the health and well-being of the population is huge due to fear and uncertainty of the future and **harm** that would be caused by the project. This includes concerns over:

- Noise, disruption to daily life, destruction of the character of the environment, landscape, and peace and tranquility that makes this village.
- House prices that are already tumbling due to the fear of living in a village blighted by this proposal.
- Despair, fear and stress over what livelihoods will become especially in family held businesses.
- Loss of tranquility and safe spaces which are known to have a positive effect on wellbeing.
- Concerns over the future generations' environment.

5 Impact on and proximity to businesses

5.1 Ardleigh Parish has a significant amount of local employment tied up in several industries encompassing agriculture, mineral extraction, healthcare, animal welfare, tourism and commerce. Many businesses are based here BECAUSE of its setting in a rural area of natural beauty. We also have angling and sailing on the reservoir and local lakes which would be affected by pylons and infrastructure.

Without the rural setting, beauty and tranquility, several local businesses and clubs will be unviable, and others would relocate at a cost to local jobs and the economy. The disruption caused by the work to install the infrastructure that National Grid proposes and the pylons and cabling themselves are expected to have a severe impact on many local businesses. The proposed scheme puts at direct risk hundreds of jobs in Ardleigh Parish alone. Whatever the 'green jobs' of the N2T proposal, they cannot come close to offsetting that loss of local employment, value creation and income in our community.

Some case studies showing, in their own words, how businesses would be harmed are given below.

5.2 Case Study 1

Genuinely You Ltd

The harm/s created by the project are significant and far reaching across the whole of East Anglia but particularly around Ardleigh. It will change things for ever. In addition to the devastation the installation will create locally, should the installation if the Norwich to Tilbury Project go ahead, it will impact directly and negatively on both me and on my business.

I moved to Ardleigh twelve years ago. I chose Ardleigh because of the local landscape, the proximity to the countryside and to nature and because I wanted to live somewhere which was peaceful.

My business will be significantly affected. I work with clients, many of whom come to me to deal with stress, trauma and personal challenges, so having a peaceful uninterrupted environment to meet with them in person or over Zoom is vital. During the installation there are likely to be in excess of 500 HGVs passing my house with all the noise, dirt and vibration that will cause – the current peace and tranquillity will be shattered.

I work from home and a good part of my work involves recording interviews, (My radio show reaches well over 3 million listeners worldwide each month). The nose of traffic and works will significantly interfere with my being able to carry out this activity effectively.

I create videos to support personal development and the development of Enlightened Leadership – this function will be disrupted too. May I politely suggest that those leading this project would benefit hugely from engaging with the principles taught in these videos as so far as I can tell there is nothing enlightened about the way things are been done.

As the CEO of Genuinely You Ltd, and of Gina Gardiner Associates, Gina is the creator many training resources including the 'Thriving Not Surviving' personal and spiritual development programme, 'The Personal Empowerment Plan,' 'The Relationship Bridge', 'Harness Your Power As An Empath Accelerator Programme' and The CPD Standards Office accredited 'Enlightened Leadership Programme', and so much more. To find out more about Gina and her work go to: https://genuinely-you.com

5.3 Case Study 2

Skylark

If it isn't already hard enough to keep a small, local business alive in this current climate, the imposing pylon project is certainly making it an awful lot more stressful. Two years in and we're finally starting to see more customers come through our doors and enjoy what our beautiful setting has to offer, but rather than being excited about what the future holds for us with this growing customer base, we can't help but worry about those customers soon choosing to go elsewhere once several pylons can be seen from our scenic terrace. The disturbance during the project is a huge concern for us; how can we run tranquil events such as yoga/meditation sessions and vineyard tours with ongoing construction traffic coming in and out of Wick

Lane/Dead Lane?

Our regular customers are asking lots of questions about the future of our wonderful business which focuses on sustainability, as they're very aware of the damage that the pylons could cause us. We've just started to see success as a wedding venue where customers from across Essex/Suffolk and London are enquiring about having their special day at Skylark, mainly due to the tranquil setting with a spectacular sunset to capture some beautiful photos of their day. Pylons erected in the backdrop are most certainly going to have a negative impact on this growing aspect of our business.

We are a family-run business who have put absolutely everything into this (starting out Covid-19, the cost of living crisis, increases in minimum wages and taxes, and now the pylons), with the ambition of passing Skylark on to our children in the future. The thought of this ambition being destroyed as a result of National Grid's lack of awareness and empathy is heart breaking.

We spoke with representatives of the National Grid at the most recent Langham consultation to raise concerns that we hadn't been contacted directly. They acknowledged that Skylark had been missed and took details to get in touch, which they still haven't done so. With no contact, it's causing a lot of undue stress to us, and they cannot have factored the mental and financial implications to us and our business, so therefore cannot cost the proposed plan and alternative plans properly.

5.4 Case Study 3

Jack Rabbit Brewing Company

My name is Spencer Pettitt, a director of Jack Rabbit Brewing Company based at Prettyfields Vineyard in Ardleigh. I am writing this email with the deep concerns of the planned 160mile Pylon construction running across the rural countryside of Norfolk, Suffolk and Essex. We work in collaboration with Skylark Farm Shop at the brewery where one of our unique selling points is to offer the local community a wonderful setting for hospitality with a picturesque view of the glorious countryside we have on our doorstep. This whole scenario would be devastated if the planned project of implementing these 50m grotesque pylons on our doorstep went ahead. Not only would it destroy this lovely rural landscape we are fortunate enough to enjoy but the impact on not only people's lives who live and work here but also the lives of the many animal species that call this area home would be devastating.

I find it incomprehensible that in 2024 the alternative plan of running an underwater cable offshore would not be a far better option. The technology is there but it seems that profit over environmentalism seems to be the order of the day with National Grid. Although the powers above seem to think an offshore solution would be problematic I would like to remind these people the first transatlantic cable started production in 1854, 170 years ago and i think we can safely say technology has improved hugely in that time frame. Therefore I urge you to do the right thing and see common sense in banning the pylons and going for the offshore option.

5.5 Case Study 4

Benson Stud

A brief history and effects the Pylons will have on our business.

I established the Stud which was originally a fruit farm in the early 70's. We have built up a business in which we cater for top class racehorses with owners from all over the world.

Horses that board here have made up to £6 million today i have a horse that cost £1.4million.

I employ local staff one of which has worked for me for 35 years.

My son the only licenced racehorse trainer in Essex has expanded our facilities to include more land, two gallops, refurbished stables and has invested in building a bungalow to bring up his 3 children, as you can

imagine at a huge investment. National Grid want to erect Pylons opposite our land and therefore they will need to wrap the water and gas pipes that goes across our land and gallops.

Excavating on our land to wrap the Water and Gas Mains would lead to closure of the Stud and Racehorse Training facilities run by my son Charlie. The paddocks were laid 50 years ago they take years to form a turf that cushions and supports growing thoroughbreds. Running over them with heavy machinery will damage the turf and when trenches are dug they will take years to consolidate, if a horse were to gallop across the paddocks on the unstable ground they would be in danger of sinking and breaking a leg or other serious injuries. My son's training operation would be affected because it would be unsafe to ride past noisy machinery with contractors coming in and out. The sand canter his main conditioning track would not be able to be used as it is to be excavated due to the gas main running through it. Racehorses have a short racing life so owners will not be in a position to wait until the canter is back in use.

Once he loses clients it is likely they will not come back especially if they run well for another trainer. As for the Stud business we specialize in rest and recuperation for the top trainers in Newmarket they recommend their clients to send their horses to us, their clients include The King and Queen, Major Arab Owners, Cheveley Park Stud the UK's leading British Breeder Owners. These trainers will not be in a position to recommend us if they know the stud is unsafe. This winter we had individual horses that cost 1.4 million and 2.5 million pounds and have had horses here worth 6 million and 4.2 million pounds. Once the clients move to another Stud there is no guarantee they will ever come back to us especially if they know the paddocks are unsafe. We are a family business that has always employed local people we have a member of staff here that has worked for us for 35 years and he will sadly lose the only job he has ever had. The erection of Pylons is a disaster- we can no longer invest in the property or the business because of the ongoing uncertainty and I am will not be the only one in this position.

The paddocks that have taken years to establish will have contractors driving and bring heavy equipment to dig trenches, they will then take years to consolidate before they are safe to use.

Our clients will not be happy to send valuable horse here under those circumstances.

It will not be safe to ride out with contractors here and on top of that the noise of a pylon being constructed opposite.

This will lead to a loss of jobs, loss of money we spend in the local economy with vets, feed merchant's farriers, Agricultural contractors ,fencing etc etc.

The National Grid Scheme is a disaster, business cannot invest due to the uncertainty.

From the outside it looks like the management companies and design teams are determined to take as much as they can from the government without looking as alternative less disruptive schemes.

I have lived here for 50 years built a respected business from scratch which I hoped my family would continue.

But I have no option but to inform National Grid that they will have to buy the whole of my property as it will never be the same.

5.6 Case Study 5

Ardleigh Caravan and Camping Park

This project poses significant and detrimental impacts on the surrounding environment, the quality of life for residents.

It threatens the viability of my caravan site business, which I have built up over the last 25 years. This has been stated by visitors that say they would not be staying on our site if there were pylons constructed.

Local tourism economy would suffer, e.g.: Wooden Fender, Prettyfield, Green Island, and other places.

The introduction of pylons will irreversibly alter the natural landscape, compromising the visual appeal and tranquillity that define this area.

Moreover, the health and safety concerns associated with pylons cannot be overlooked. The electromagnetic fields generated by these structures have been linked to various health risks, causing undue anxiety among residents. Also, at my site meeting with Fisher German they stated that the area outlined in red on the plan, was due to the Anglian Waters mains that runs through my property. This would need to be protected as the electromagnetic field would speed up corrosion of steel pipes.

From a financial perspective, the presence of pylons will significantly devalue my property. The loss of aesthetic appeal and the potential health risks will deter prospective buyers, For over 20 years, we have built a strong reputation in the caravan and motorhome storage business, both with our clients and within the trade. The proposed construction of the pylons project would completely destroy our business for the following reasons:

The project plans, indicate that the pylons would be constructed right through the middle of our storage compound. This would result in the loss of a significant proportion of our storage facility. Consequently, we would be forced to terminate all storage contracts and issue refunds to our clients, who would then need to find alternative storage options for their caravans or motorhomes. The high level of security currently provided within our compound would no longer be quaranteed if this project proceeds.

Furthermore, the remaining part of the site would become inaccessible due to the construction area running through the middle of it. This would compel us to cancel and refund the contracts of the remaining clients, ultimately leading to the complete destruction of our business.

This project would devastate our livelihood and wipe out everything we have worked for.

In summary, the construction of pylons poses a direct threat to my caravan site business. My clientele, who come seeking a serene and picturesque escape, will be deterred by the unsightly pylons and the accompanying disruption. The resulting loss of business would be devastating, not only to me personally but to the local economy, which benefits from the tourism my site generates.

5.7 Case Study 6

Peake Fruit

The Peake Fruit site and farm in Ardleigh is fundamentally impacted by the proposed N2T plan. Its land will be traversed by the transmission lines and it will also be encroached by the proposed EACN substation. The earthing works for the proposed underground cabling may also impact the sewer/water pipe that runs at the back of the Peake Fruit site.

The site employs 200 people at present although this would be expected to increase under future plans. At present it is primarily covered by intensively planted fruit trees, and soft fruit crops in tunnels. They all have significant crop value. The fruit are grown over many years, and some take many years to mature and deliver fruit. Essential to the operation of the site is its large deep lake which irrigates the land through a network of well established pipes. The lake also acts as a local amenity and has attractive landscaping. It is currently extensively used for fishing, and the owners have well developed plans for the installation of cabins around the edge of the lake to offer more facilities for tourism in the local area as well as creating more employment on site. It is a significant biodiversity asset with a colony of swans on site amongst its other wildlife. The site furthermore has a small airstrip, which has planning permission for flights.

Peake Fruit fundamentally reject the current plans, and are also very critical of the consultation process.

With regard to the consultation process they were only engaged about 2 months ago by Fisher German. They have had only 2 meetings so far, and their concerns and suggestions to mitigate the effects of the proposals and feedback to date has not received a response. They are both surprised and disappointed by this since a) their site is directly on the proposed route and encroached by the EACN substation, and b) they had been engaged at a much earlier stage before detailed design had been completed wrt their Leavenheath site.

Their feedback to Fisher German has stated that their site is simply not acceptable for use by the N2T project for multiple reasons:

- Access and loss of land The EACN substation encroaches on the main entrance to the farm and to the lake. Both construction and operation would be fundamentally disruptive to the site operation
- Commercial loss of value There would be an enormous loss of crop value due to destruction of long growth fruit plantations
- Underground cables would of course destroy a wide swath of fruit and their constructions which simply could not be regrown
- Pylons would have a similar outcome as research has shown that growth patterns of fruit close to electrical lines is abnormal
- They have been advised that earthworks related to the underground cabling would likely interfere with long established irrigation and drainage infrastructure. Any water line interference would halt production and putt in jeopardy contracts with their customers, mainly large supermarkets.
- A significant area of fruit around the directly impacted areas would be at risk
- Land value is less than crop value, but a nonetheless substantial loss of value would take place
- >200 local jobs would be immediately at risk, and future jobs building and operating the proposed lakeside cabins would not be created
- Contracts for fresh UK produce with low food miles to all of the major supermarket retailers would be lost, jeopardising UK food security as well as adding to the environmental cost of the scheme
- Environment
- Impact on water supply to site. Crops are irrigated and will not grow without existing well established pipe network
- The lake is an established local amenity used by fishermen, with well advanced plans to further develop the lakeshore with cabins to enhance tourism opportunity in the area
- The entire site is a haven of biodiversity with plant, insect and wildlife essential to the local ecosystem
- The lake is home to a colony of swans as well as many other bird, fish and animal species
- The airstrip would not be able to operate if pylons are built on the proposed plan as they would interfere with both landing and takeoff flightpaths. This would result in a loss of income to the business and a loss of an unusual recreational asset for the area

The bottom line is simply that the Peake Fruit site and the farm at Ardleigh would be unviable if the scheme is built using the proposed route. This objection relates equally to both pylon installation and cable undergrounding. Both are equally incompatible with the site remaining a viable commercial entity as undergrounding would be even more invasive and destructive to the site's operations. Their next step as a business is to prepare a feasibility study for the site. Taking into account the direct commercial losses and the various other harms, without doubt a compensation claim running into many £millions would result. The further impact on the local economy and environment, which Peake Fruit has worked hard over many years to nurture with the community, would be incalculable but equally substantial.

Peake Fruit have proposed that at a minimum to route must be moved off their site onto adjacent arable land. They support any proposal to move the EACN substation to a site North/West of the village such that transmission lines do not have to pass both in and out of Ardleigh parish. However, they are most strongly in favour of an offshore route.

5.8 Case Study 7

Bloomfield Barn Community Activities

We live at Bloomfields Barn, Wick Lane, Ardleigh, Colchester, CO7 7RF. The line of the pylons will go across our driveway and so will the haul road. This will mean that there is significant harm to our property.

There are many people that access the two properties down our driveway. As well as the normal services such as Royal Mail, the dustbin collectors and delivery vans, we have visitors regularly and we go in and out

for work and recreation. We often run church services and events where there can be 30 cars attending. We run Forest School sessions for children so there are vehicles and pedestrians going up and down the drive. We estimate on an average day there would be 50 car movements. The haul road would affect this enormously.

We are concerned about the health implications of having pylons and electric wires so close to where there are lots of children playing.

There are many species of wildlife that use our nature reserve and the mature trees along the drive. These include badgers (we have setts on the land where the existing cables are supposed to be put underground) polecats, deer, turtle doves, as well as many common birds.

We are very concerned that the value of our property will be decreased by the pylons. We have just finished a major renovation of our Grade 2 listed barn.

5.9 Case Study 8

Paxmans Angling Club

Paxmans Angling Club gained the fishing rights to Home Farm Reservoir from Boxford Fruit Farms back in 2003. Since then, after years of hard work and investment, it has turned into the mature, well stocked lake that it is now.

The lake now has abundant wildlife including not only the many species of ducks, frogs and toads on the lake but two species of deer, foxes and rabbits that live in the surrounding lakeside wooded area's.

If the works were to go ahead, the lake and lakeside wildlife would surely disappear with all the disruption, but also the water table could be affected, not only the level of the lake but also with pollution of the lake. Both of these would have a dramatic effect on us as a fishing club and to Boxford Fruit Farms as a business.

Another reason for our objection and far more serious for Paxmans Angling Club, is that if the works were to go ahead, and looking at the map, the works would be directly at the entrance of the lake, where we also have a large metal storage unit which I'm guessing would be problematical. This would clearly lead to us having no access to the lake and due to health and safety regulations we would undoubtably be told we couldn't fish the lake until the works have been completed.

If this were to be true, then because Home Farm Reservoir is our main source of income, we would probably not be able to sustain the loss of revenue and could end up having to close the club.

6 Agriculture and Farming

6.1 **Agriculture and Farming in Ardleigh.** The Parish of Ardleigh is predominantly an area of agriculture farming and along with its neighbouring parishes, benefits from top grade food production land (some of the "best and most versatile" in the country), capable of achieving high tonnages of essential crops which contribute to part of the country's staple diet and exports.

National Grid's (NG) proposed Norwich to Tilbury (N2T) route, as part of its so-called Great Grid Upgrade, would severely **HARM** or indeed **DESTROY** hundreds of acres of valuable land with its current plans for 50m high pylons, 100m swathes for undergrounding and enormous land take for substations in and around Ardleigh.

- 6.2 Many farms have been in the same family for generations. It's a way of life as much as it is a tough and demanding industry to work in. 'Living on the job' as it's often referred to and always being on call, is dedication that most people would never have to consider. As such, NG's proposals would see the desecration of any farmer's (and associated employees) workplace and in most places, the family home.
- 6.3 The need to retain "best and most versatile" agricultural land is rendered all the more significant because:
 - the ongoing coastal erosion that continues to reduce agricultural land supply in this eastern region of the country.
 - Local residents are also conscious of contemporary concerns surrounding food insecurities (arising from economic recession, Brexit, the pandemic and international conflicts).
 - Areas of land would be left unworkable and non-cost-effective to manage, whilst others would be
 divided by haul roads and pylons construction routes, making access difficult. Today's farming
 requires larger fields in order to allow for modern agricultural vehicles and machinery which are big,
 save on time, reduce pressure on the workforce and are more efficient.
 - Farmers would be restricted on the crops they could grow and yields would be affected by dust pollution (lenticels in plants get blocked and photosynthesis is unable to take place), resulting in stunted growth.
 - Ardleigh's landscape is flat and open and although currently bordered by hedges and windbreaks, much of this screening would be lost! The removal of hedgerows and windbreaks would increase the risk of soil erosion. Depending on soil conditions and supporting practices; a single row of trees protects for a distance downwind of approximately 10 to 12 times (more) the height of the windbreak. As such, removal of these could result in reduced crop productivity due to permanent loss of top soil.
 - It should be highlighted that Ardleigh has recently suffered from flooded fields and roads, with ditches brim full, due to two mild wet winters (22/23 and 23/24). See https://www.theguardian.com/environment/article/2024/jul/03/disastrous-fruit-and-vegetable-crops-must-be-wake-up-call-for-uk-say-farmers.
- 6.4 Evidence (highlighted in Suffolk County Council's response 21/05/2024) that trenching and undergrounding has, in some areas, caused a 20% reduction in cropping for the last 20 years.
- 6.5 Examples of impact on and harm to specific farming businesses:
 - Peake Fruit Ltd is a major soft fruit producer based in Ardleigh, supplying to all the top supermarkets. The location of its main production area neighbours the proposed pylons route, haul roads and substations site. See case study above.
 - It is inevitable that dust issues would arise throughout the construction process, and as such, established neighbouring soft fruit production areas would be adversely affected. Raspberries and strawberries in particular, are not washed prior to being packaged and as such, there would be a

- high risk of fine dust particles remaining on the fruits. It is also important to understand that harvest workers would be at risk of ingesting dust particles. See also business case studies section 4 above.
- Prettyfields vineyard would be unable to expand its cropping area and the associated Skylark
 café/restaurant would undoubtedly see a decline in customers who would not wish to sit on the
 terrace close to dust, noise and with a menacing direct view of pylon TB015!
- 6.6 In many cases, it would leave farmers/growers in a situation where their land would no longer remain viable if crops were contaminated and therefore unfit for sale/human consumption. It would also be questionable as to whether hay crops would be suitable for livestock if subjected to dust. Soil mixing, erosion, rutting and compaction are interrelated impacts commonly associated with any type of construction work, let alone on the scale associated with the energy transmission construction proposed for Ardleigh.
- 6.7 The degree to which soils are compacted by heavy construction equipment would depend on the type of soil and its saturation level, but there's no denying that the substructure would be **PERMANENTLY DAMAGED**, along with in-field drainage systems and ditches that provide many functions in the farming system by:
 - Removing excess field water
 - Encouraging deeper rooting
 - Extending the growing season
 - Allowing the fields to maintain productivity
 - Keeping soil in the field
 - Helping to reduce compaction
 - Providing a corridor for wildlife that allows species to move between different areas.

6.8 Other key concerns include:

- Crop irrigation could be made extremely difficult, especially in areas where fields are divided by haul roads and trenching ('long land' will become 'short land' meaning that irrigators will need moving far more frequently, which isn't cost effective); also where the main connecting points may have been damaged. Other issues possible where water abstraction via boreholes has been disturbed or the water table affected.
- For reference, the parish of Ardleigh (as stated in Essex Local Minerals Plan), contains a vital national reserve of silica sand which is available nowhere else in the UK and should be spared from being sterilized by the pylons position.
- Many farms in and around Ardleigh are part of the countryside stewardship scheme, which encourages wildlife and biodiversity to flourish. Through this scheme, many farmers have taken advantage of government grants to plant new hedgerows and trees with native species. NG's current proposals would see many of these ripped out!
- Operation Turtle Dove, as part of RSPB's work to save this species from extinction, is working with several landowners in Ardleigh who provide cultivated strips and feeding areas to encourage them to the sites and disperse seed feed throughout the season. One of these sites would be completely destroyed under the current plan for pylon TB006 and undergrounding.
- On the northern boundary of Ardleigh, Benson Stud Farm (catering for top class racehorses with owners from all over the world), stands to lose its very reputable business if NG's current proposals go ahead. If this were to happen, the owner would have no option other than to close the Stud and Training operation. It would take too many years for the gallops to return to their consolidated safe structure for training such valuable horses. The knock-on effect on the local economy (vets, feed merchants, farriers, agricultural and fencing contractors) would be considerable! See case study above.
- Livestock farmers may need to relocate animals if grazing land is disrupted by the removal of fencing, dust and noise pollution, proximity to construction area.

- Traditional rural sports (i.e., fishing and shooting) would undoubtedly see fewer people partaking in a noisy and dusty environment. There are several farms in and around Ardleigh with fishing lakes and game bird shooting facilities.
- 6.9 It has been confirmed from an agricultural insurance broker that risks would be heightened if NG's proposals go ahead, due to:
 - The removal of established hedges which provide natural security
 - More people than usual working on the land
 - Greater threat from theft
 - Greater risk of trespassing (people using open areas as footpaths)
- 6.10 The importance of strong domestic production is highlighted as the foundation of UK food security. In 2023, UK food inflation rose to 19.2% and ongoing global stability caused by the war in Ukraine and incidents of extreme weather have further highlighted the vulnerability of the UK's food system.*
- 6.11 Many factors have contributed to a contraction in the farming sector which meant there were 7,000 fewer agricultural businesses in the UK in 2022 than there were in 2019, which is hugely concerning!

In conclusion: NO FARMERS! = NO FOOD!

7 Historic Environment

7.1 There would significant harms to heritage, archaeology and historic assets in Ardleigh should the current proposals proceed. For ease of presentation, these are outlined in a separate report which is submitted alongside this document and forms part of the Ardleigh Parish Council submission together with two appendices, a comprehensive heritage survey spreadsheet and a document summarizing that survey.

Part 3 Impact of Construction and Cumulative Impacts

1 Cumulative Impact

- **1.1 Cumulative effects** can be defined as effects that "result from multiple actions on receptors and resources and over time and are generally additive or interactive (synergistic) in nature. Cumulative impacts can also be considered as impacts resulting from incremental changes caused by other past, present or reasonably foreseeable actions together with the project" (1). Cumulative effects are broadly those that result from the accumulation of a number of individual effects that may have synergistic aspects.
- **1.2 Adverse cumulative effects in Ardleigh**. Ardleigh is the most adversely impacted Parish on the N2T route. The NG proposal includes:
 - 21 Pylons wrapping round 3 sides of the Conservation Area going out of the Parish.
 - 21 Concrete Pads for Pylons.
 - 5.6km of Overhead cable.
 - Overhead line Pulling areas every three Pylons.
 - 5km of Pylon Haul Roads.
 - Road widening on at least 3 access roads.
 - Restricted areas of Draft Order Limits between 220 and 100m wide.
 - Restricted areas of Statutory Undertakings.
 - 4.5km of Undergrounding Haul Roads.
 - 4.5km of up to 220m of vegetation cleared undergrounding swathe coming into the parish.
 - 15 or more road crossings.
 - At least 7 laydown and compound areas.
 - Drainage ponds and drainage.
 - 1 x 12ha EACN substation on a 42ha site.
 - 1 or more windfarm and Interconnector sites.
 - More than 500 additional daily HGV movements per day during construction.
 - 7am -7pm working Monday Friday and 8am 5pm Weekends.
 - Optimistic build time 3 Years!

Some parishes will only suffer road widening and access roads. Most will in addition have Pylons and Haul roads. A small number will have some Undergrounding, Pylons and Haul roads. Only the Parish of Ardleigh will have all of the above.

In addition, there should be consideration of the cumulative harms arising from related projects, should they all go ahead. The cumulative harms that would result from North Falls, Five Estuaries Tarchon need to be factored in because, even though the DCO will only relate to Norwich to Tilbury, the other projects would not exist in isolation and would add to the harm.

The impact of any of the above works can be devastating to a community however, the cumulative effect of all these things happening in Ardleigh apparently simultaneously over at least a three-year period would be catastrophic.

1.3 Adverse cumulative effects on Wildlife.

There are many ways that development can affect wildlife. Impacts can be temporary or permanent and can happen both during construction and once the development is in use:

- Direct harm wildlife can be killed or injured during construction, or when building is finished. For example, a development resulting in more traffic may increase the risk of wildlife road deaths.
- Habitat loss development can cause the loss of wildlife habitats like woodland, grasslands or ponds. Note that wildlife can use different habitats for feeding, breeding and rest, and can use different habitats at different times of year, or for different parts of their life cycle. Just because a habitat isn't used all the time doesn't mean it isn't important for wildlife.
- Disturbance noise and light from machinery, traffic and people during and after construction can be harmful to wildlife. When animals avoid an area or move away, they may have to travel further to reach food, or compete with others for resources.

- Pollution pollutants released into the air, soil or water from construction or after development can be harmful to wildlife. Pollution from developments can affect wildlife on and near the site, and but also some distance away.
- Fragmentation development can block the movement of wildlife, reducing ecological connectivity and affecting their ability to find food, breed and adapt to climate change.

1.4 Wellbeing- cumulative effects

The impact on the health and well-being of the population is huge due to fear and uncertainty of the future and **harm** that will be caused by the project. Lives will be affected by the scale of the project in this location, there will be inevitable loss of business and agricultural land, and this is already causing harm to the health of those affected this manifests itself in.

This includes concerns over:

- Noise, disruption to daily life, destruction of the character of the environment, landscape, and peace and tranquility that makes this village.
- House prices that are already tumbling as a result of the fear of living in a village blighted by this proposal.
- Despair, fear and stress over what livelihoods will become especially in family held businesses.
- Loss of tranquility and safe spaces which are known to have a positive effect on well-being.
- Concerns over the future generations' environment.
- Concerns over the impact and viability of businesses and agriculture.
- Worries over values of homes and other properties.
- Worries over the health effects of living close to the EMF emitted by pylons.
- Concerns about disruption to roads and other transport affecting emergency services and carers.

The cumulative effect of these harms to the community, individuals, the environment and wildlife is not known for sure. However, the anecdotal effects of HS2 on people and wellbeing are well documented and studies are still underway. We strongly feel that particularly in relation to the cumulative effect on Ardleigh NG has failed in its legal duty including as outlined in the Nationally Significant infrastructure Projects Advice Note 17)^{xi}.

1.5 Policy implications

The need to consider cumulative effects in planning and decision making is set out in planning policy (for example: The relevant National Policy Statements (England and Wales); National Planning Policy Framework (NPPF) (England); Planning Policy Wales (Wales)), in particular the National Policy Statements (NPSs). For example, the Overarching NPS for Energy (EN-1) paragraph 4.2.5 states that "When considering cumulative effects, the ES should provide information on how the effects of the applicant's proposal would combine and interact with the effects of other development (including projects for which consent has been sought or granted, as well as those already in existence)". For the purposes of this Advice Note, 'other existing development and/or approved development' is taken to include existing developments and existing plans and projects that are 'reasonably foreseeable'.

NPS EN-1 paragraph 4.2.6 goes on to state that the Secretary of State should consider how the "accumulation of, and interrelationship between effects might affect the environment, economy or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place."

The NPSs variously state that applicants should, amongst other matters, consider mitigation for cumulative effects in consultation with other developers; assess cumulative effects on health; give due consideration to other NSIPs within their region; consider positive and negative effects; and consider environmental limits (e.g. the potential for water quality effects to arise due to incremental changes in water quality).

2 EACN Proposed Substation

2.1 The proposals would include 400 kV / 132 kV transformers and other typical equipment associated with a HV substation. (4.9.16) The operational footprint of the substation is likely to be approximately 520 m x 230 m with heights of approximately 15 m excluding any requirement for landscaping and cable / overhead

line connections.

- There would be **harm** to Ardleigh village and residents. Loss of Grade 1 agricultural land when food security is a major concern:
- The EACN site is on prime BMV Grade 1 farmland.
- Temporary structures or otherwise will have ruined and compacted the land Topsoil stripped off this land will not recover for re-use
- Pollution in terms of noise, lights, associated with a major infrastructure.
- There is no meaningful environmental mitigation or re-instatement for unnecessarily destroyed farmland or ancient environments and habitats
- Security and safety impacts for residents (fire, subsistence, damage to property etc)
- 2.2 Concerns are replicated throughout the construction process about the overall effect on a rural village as outlined previously.
- 2.3 Lives will be affected by the scale of the project in this small but productive part of Essex and East Anglia, there will be inevitable loss of business and agricultural land, and this is already causing t harm to the health of those affected this manifests itself in:
 - Concerns over the impact and viability of businesses and agriculture.
 - Worries over values of homes and other properties.
 - Worries over the health effects of living close to the EMF emitted by Pylons.
 - Concerns about disruption to roads and other transport affecting emergency services and carers.
- 2.4 Despite the statement in the Planning Inspectorate Comment in the Scoping Opinion that economic effects on landowners and farmers operation......"significant effects are unlikely...." This is insulting to say the least and very harmful.
- 2.5 Farmers and landowners will lose land and livelihoods. Farmers are reporting damage to their own and their families health and wellbeing (primarily anxiety, stress and depression) due to the harm and uncertainty caused by:
 - land agents for NG.
 - attending NG information sessions and not having questions answered either consistently or with appropriate knowledge.
 - understanding the full scale of land lost once there is close scrutiny and research reflecting what is shown on the maps.
 - A number of food producers will also be harmed by the proximity of the construction, vineyards, fruit & vegetable growers.
 - Leisure business owners in the area will be harmed.

3 Road construction

3.1 The desk study completed (Study Area 5.10.2) so far has not reflected the true nature of the Parish of Ardleigh and surrounding area. Overall, the whole NG impact on Ardleigh is unacceptable and massive. The best solution would be to develop an offshore project which can protect the future of generating and transferring electricity.

We do not believe that the Norwich to Tilbury proposal can have been scoped with site visits *as it is ridiculous to consider* developing massive infrastructure in a rural village such as Ardleigh with restricted roads.

3.2 Harm. 120m haul roads + 50m each side (=220m) for the undergrounding from Dedham AONB into Ardleigh and the 60 metre haul roads + 40m each side (=140m) to service the installation of the pylons is totally unacceptable and will cause irredeemable damage to the land.

4 Effects on vegetation during construction and beyond

4.1 According to national Grid's own reports 'for OH haul roads Vegetation affected/managed: An additional up to 8 m of vegetation either side of the 40 m would then be managed during construction and operation (and maintenance) to allow for electrical clearance from the conductor to be maintained (assumes a generalised allowance of 0.5 m growth per year over a 5-year period)' (PEIR 4.8.18)

Vegetation potentially affected: A further, up to 22 m of vegetation either side of the 8 m would be potentially affected, which includes allowances for design flexibility as per the proposed lateral LoD".

4.2 Clearing widths of at least 20m of vegetation/ ancient hedgerows and trees is depletion that cannot be corrected. Roads around Ardleigh are mostly narrow, often single-track lanes around the proposed site of the EACN. Being a nucleated medieval village, several dwellings are situated close to these lanes.

5 Environmental impact

5.1 We consider the NG claims and implications in promotional material that this is a 'green' project to be ludicrous taking into account the vast carbon footprint this will incur in terms of:

- Concrete
- Steel (imported)
- Hardcore
- Tarmac
- Fuel
- Machinery movements etc.,
- Transportation for all items on huge vehicles
- Loss of unrecoverable prime farmland
- Fencing
- Security measures

5.2 Building haul roads, temporary construction compounds and permanent and temporary access roads will cause great **harm** to Ardleigh:

- Cutting across arable fields and other business land
- Removal of hedges, (changing the landscape)
- Access around the village for residents, businesses and visitors
- Size and volume of earth-moving and road laying vehicles are inappropriate on the access routes to the sites and in many cases to the village in general
- 424 HGVs daily are expected to access the EACN from the east of the village
- 115 HGVs daily are expected to access the village from the west side.
- Volume of Construction traffic & working hours as stated (4.7.2) 7 days a week for five years, Additional construction working hours (4.7.3) as required implying this could be 24/7 Noise levels with several machines in use at the same time, negates the Db acceptance level
- Challenge to assessment statements in the Scoping Opinion: (PEIR Vol Part 1 of 4 Appendix 5.1)
- The response to the EIA scoping opinion (para 6.9.9) "Impacts on soil ecosystem functions are likely to be limited". Not true but a great **harm**
- Impacts to Agricultural operations states "the amount of agricultural land to be permanently lost is considered 'limited' and not likely to lead to significant effects". Not true as this will take away around 192 ha of farmland.
- Economic effects on landowners and farmers.

5.3 The NG proposal is "to scope out the economic effects on individual landowners and farmers on the basis of compensation agreements that would be made outside the EIA process".

- It is further stated that the Inspectorate agrees that significant effects are unlikely so it can be scoped out of further assessment. What criteria leads to this conclusion which is a **harm.**
- It is also noted that the Inspectorate requires the ES to fully explain the methods and procedures to

be used.

- NG assesses that the following issues are unlikely to have significant effects. We challenge the following as an example:
- Huge areas of Grade 1 BMV land will be lost. This is not 'insignificant'
- Landowners losing businesses is not 'insignificant'
- Depletion of ecosystems in soil is not 'insignificant'

6 Other harms

6.1 Many of the Draft Order Limits (Fig. 4.1 Proposed Project Design Vol 11) cover several areas beyond the proposed construction sites into fields and other spaces, i.e., lanes, footpaths etc., causing **harm** and stress to householders as the limits are only now becoming evident.

Part 4 Overview of harms by location

1. Summary by pylon, substation, undergrounding etc

This table brings together the proposed route of underground cabling, Substation and pylons and cabling with associated key harms: referenced within the report starting with the most northerly infrastructure and working down towards the south.

Reference/	Key harms with reference to other sections of this report
Item	
Cabling Ardleigh Heath (A12-Rookery Chase)	Public Rights of Way : Footpath Numbers FP129 8, 158 43 and 158 23 Malting Farm Lane to Harts Lane (see Part 2, 3.4 Key concerns and harms by location above).
	Green Spaces : Woodlands attached to Birch Wood (see Part 2, 3.4 Key concerns and harms by location above).
	Historic Environment: Proximity to listed buildings. Non-designated heritage assets at risk.
Ardleigh Village	Green Space : Glebe Land Corner and Harwich Road Allotments (see Part 2, 3.4 Key concerns and harms by location above).
	Business impact : Case Study 1 Genuinely You Ltd, Case Study 4 Benson Stud, Case Study 6 Peake Fruit, Case Study 8 Paxmans Angling Club (See Part 2, 5 Impact and Proximity to Business).
	Historic Environment: Proximity to listed buildings and scheduled monument (1002146).
	Non-designated heritage assets with high archaeological potential at risk.
Proposed EACN Substation	Public Rights of Way : Footpath 158 28 (and 29) from the railway line near the village to Morrow Lane and from Morrow Lane to Little Bromley Road. 158 29 joins into 28 in the field; The substation and associated construction will be visible. (see Part 2, 3.4 Key concerns and harms by location above).
	Historic Environment: Proximity to listed buildings, non-designated heritage assets at risk, crossing of two Roman Roads and other Roman non-designated heritage assets on this proposed site. Visible from scheduled monument (1002146).
TB001 and 2 (EACN N)	Public Rights of Way : Footpath 158 28 (and 29) from the railway line near the village to Morrow Lane and from Morrow Lane to Little Bromley Road. 158 29 joins into 28 in the field. (see Part 2, 3.4 Key concerns and harms by location above)
	Business Impact: Case Study 6 Peake Fruit (See Part 2, 5 Impact and Proximity to Business)
	Historic Environment: Proximity to listed buildings, non-designated heritage assets at risk, crossing of two Roman Roads on this proposed site. Visible from scheduled monument (1002146).
TB003 (EACN S)	Public Rights of Way: Footpath 158 28 (and 29) from the railway line near the village to Morrow Lane and from Morrow Lane to Little Bromley Road. 158 29 joins into 28 in the field. (see Part 2, 3.4 Key concerns and harms by location above)
	Historic Environment: Proximity to listed buildings, non-designated heritage assets at risk, crossing of two Roman Roads on this proposed site. Visible from scheduled monument (1002146).
TB003 (close to EACN)	Public Rights of Way: Footpath 158 28 (and 29) from the railway line near the village to Morrow Lane and from Morrow Lane to Little Bromley Road. 158 29 joins into 28 in the field (see Part 2, 3.4 Key concerns and harms by location above)
	Business Impact : Case Study 6 Peake Fruit (See Part 2, 5 Impact and Proximity to Business)
	Historic Environment: Proximity to listed buildings, non-designated heritage assets at risk, crossing of two Roman Roads on this proposed site. Visible from scheduled monument (1002146).

TB004 (Little Bromley Road)	Public Rights of Way: Footpath 158 28 (and 29) from the railway line near the village to Morrow Lane and from Morrow Lane to Little Bromley Road. 158 29 joins into 28 in the field (see Part 2, 3.4 Key concerns and harms by location above)
	Business Impact: Case Study 6 Peake Fruit (See Part 2, 5 Impact and Proximity to Business)
	Historic Environment: Proximity to listed buildings, visible from scheduled monument (1002146).
TB005 (Little Bromley Road)	Public Rights of Way: Footpath 158 28 (and 29) from the railway line near the village to Morrow Lane and from Morrow Lane to Little Bromley Road. 158 29 joins into 28 in the field (see Part 2, 3.4 above).
	Business Impact : Case Study 6 Peake Fruit, Case Study 8 Paxmans Angling Club (See Part 2, 5 Impact and Proximity to Business)
	Historic Environment: Proximity to scheduled monument (1002146). Non-designated heritage assets with high archaeological potential at risk. Visible from scheduled monument (1002146).
TB 006 (Little Bromley Road)	Agriculture and Farming: Operation Turtle Dove (Part 2, 6.8 above) Public Right of Way: Footpath 158 28 (and 29) from the railway line near the village to Morrow Lane and from Morrow Lane to Little Bromley Road. 158 29 joins into 28 in the field (Part 2, 6.8 above).
	Business Impact : Case Study 6 Peake Fruit; Case Study 8 Paxmans Angling Club (See Part 2, 5 Impact and Proximity to Business).
	Historic Environment: Proximity to scheduled monument (1002146). Visible from scheduled monument (1002146). Non-designated heritage assets with high archaeological potential at risk.
TB 007 (Sth of	Public Rights of Way: Footpath 158 28 (and 29) from the railway line near the village to
Little Bromley Road)	Morrow Lane and from Morrow Lane to Little Bromley Road. 158 29 joins into 28 in the field (see Part 2, 3.4 above).
	Business Impact : Case Study 6 Peake Fruit (See Part 2, 5 Impact and Proximity to Business).
	Historic Environment: Proximity to listed buildings, scheduled monument (1002146), "Glebe Corner land" (Local Green Space GS6) and Conservation Area. Visible from scheduled monument (1002146). Non-designated heritage assets with high archaeological potential at risk. Route of Roman Road. Close proximity to St. Mary's Church, Ardleigh (1112060).
TB 008 (north of Bromley Road)	Habitat: Trees regenerated after Ash Dieback disease. (Part 2, 2.2 above).
	Public Right of Way: Footpath 158 28 (and 29) from the railway line near the village to Morrow Lane and from Morrow Lane to Little Bromley Road. 158 29 joins into 28 in the field. Footpath No 158 12 – Long Road West to Hunters Chase (Part 2, 3.4).
	Green Spaces: Glebe Land Corner; Harwich Road Allotments (Part 2, 3.4).
	Business Impact: Case Study 6 Peake Fruit (See Part 2, 5).
	Historic Environment: Proximity to listed buildings, scheduled monument (1002146), "Glebe Corner land" (Local Green Space GS6) and Conservation Area. Visible from scheduled monument (1002146). Non-designated heritage assets with high archaeological potential at risk. Route of Roman Road. Close proximity to St. Mary's Church, Ardleigh (1112060).
-	Habitat: Trees regenerated after Ash Dieback disease. (Part 2, 2.2 above).
Harwich Road A137, cabling on both sides)	Public Right of Way: Footpath 158 28 (and 29) from the railway line near the village to Morrow Lane and from Morrow Lane to Little Bromley Road. 158 29 joins into 28 in the field. Footpath No 158 12 – Long Road West to Hunters Chase. Bridleway and Footpath No158 2 Hunters Chase to The Street. (Part 2, 3.4)
	Green Spaces: Glebe Land Corner; Harwich Road Allotments (Part 2, 3.4)
	Business Impact: Case Study 6 Peake Fruit (See Part 2, 5).

Historic Environment: Proximity to listed buildings, "Glebe Corner land" (Local Green Space GS6) and Conservation Area. Visible from scheduled monument (1002146).

Non-designated heritage assets with high archaeological potential at risk. Route of Roman Road. Close proximity to St. Mary's Church, Ardleigh (1112060). Visible from "Carpark land" (Local Green Space GS5).

TB010 (close to Harwich Road A137 cabling adjacent to the sth)

Public Rights of Way: Footpath 158 3 from Coggeshall Road to The Street; Footpath 158 24 from the A127 to FB 128 2; Footpath 158 28 (and 29) from the railway line near the village to Morrow Lane and from Morrow Lane to Little Bromley Road. 158 29 joins into 28 in the field; Footpath No 158 12 – Long Road West to Hunters Chase; Bridleway and Footpath No158 2 Hunters Chase to The Street. (Part 2, 3.4).

Green Space: Glebe Land Corner (Part 2, 3.4).

Business Impact: Case Study 1 Genuinely You Ltd (See Part 2, 5).

Historic Environment: Proximity to listed buildings, Glebe Corner land (Local Green Space GS6) and Conservation Area. Visible from scheduled monument (1002146). Close proximity to St. Mary's Church, Ardleigh (1112060). Visible from "Carpark land" (Local Green Space GS5).

TB011 (close to rookery chase)

Public Rights of Way: in sight of Footpath Numbers FP129 8, 158 43 and 158 23 Malting Farm Lane to Harts Lane; Footpath 158 3 from Coggeshall Road to The Street; Footpath 158 24 from the A137 to FB 128 2; Footpath No 158 12 – Long Road West to Hunters Chase; Bridleway and Footpath No158 2 Hunters Chase to The Street (Part 2, 3.4).

Green Spaces: Woodlands attached to Birch Wood; Glebe Land Corner; Harwich Road Allotments (Part 2, 3.4).

Business Impact: Case Study 1 Genuinely You Ltd (See Part 2, 5).

Historic Environment: Proximity to listed buildings, Glebe Corner land (Local Green Space GS6) and Conservation Area. Visible from scheduled monument (1002146). Close proximity to St. Mary's Church, Ardleigh (1112060). Visible from 'Carpark land' (Local Green Space GS5).

TB012 (close to Dedham Road (b1029) TB013 (Close to The Street across to Dead Lane)

Public Rights of Way: Footpath Numbers FP129 8, 158 43 and 158 23 Malting Farm Lane to Harts Lane; Footpath 158 3 from Coggeshall Road to The Street; Footpath 158 24 from the A137 to FB 128 2; Footpath No 158 12 – Long Road West to Hunters Chase; Bridleway and Footpath No158 2 Hunters Chase to The Street; Footpath No's FB 158 50 From Dedham Road to FB 158 4; FB 158 4 From Dedham Road across the field to Colchester Road; FB 158 22 from The Street to Dead Lane; Footpaths FB 158 20 From Lodge Farm Road to Wick Lane and 158 21 From Dead Lane to FB 158 20 (Part 2, 3.4).

Green Spaces: Glebe Land Corner; Harwich Road Allotments; Fishing Lake and Footpaths north of Colchester Road; Woodlands attached to Birch Wood (Part 2, 3.4).

Business Impact: Case Study 1 Genuinely You Ltd; Case Study 4 Benson Stud (See Part 2, 5).

Historic Environment: Proximity to Fishing Lake (Local Green Space GS1), listed buildings and Conservation Area. Visible from scheduled monument (1002146). Close proximity to Ardleigh St Mary's Primary School. Close proximity to St. Mary's Church, Ardleigh (1112060). Visible from "Carpark land" (Local Green Space GS5). OHLs span the fishing lake.

TB014 (Close to The Street across to Dead Lane)

Public Rights of Way: Footpath Numbers FP129 8, 158 43 and 158 23 Malting Farm Lane to Harts Lane; Footpath No's FB 158 50 From Dedham Road to FB 158 4; FB 158 4 From Dedham Road across the field to Colchester Road; FB 158 22 from The Street to Dead Lane; Footpaths FB 158 20 From Lodge Farm Road to Wick Lane and 158 21 From Dead Lane to FB 158 20; Bridleway and Footpath No158 2 Hunters Chase to The Street (Part 2, 3.4).

Green Spaces: Woodlands attached to Birch Wood; Fishing Lake and Footpaths north of Colchester Road. (Part 2, 3.4).

Business Impact: Case Study 1 Genuinely You Ltd; Case Study 4 Benson Stud; Case Study 5 Ardleigh Caravan and Camping Park (See Part 2, 5).

	Historic Environment: Proximity to "Fishing Lake" (Local Green Space GS1), listed buildings and Conservation Area. Non-designated heritage assets at risk. Route of Roman Road.
	Visible from scheduled monument (1002146). Close proximity to Ardleigh St Mary's Primary School. Close proximity to St. Mary's Church, Ardleigh (1112060). Visible from "Carpark land" (Local Green Space GS5). OHLs span the fishing lake.
TB015 (Close to Ardleigh	Harm to Birds: various references throughout report to Ardleigh reservoir including section 2, 2.2.
Reservoir, Dead Lane and Wick Lane)	Public Rights of Way: Footpath Numbers FP129 8, 158 43 and 158 23 Malting Farm Lane to Harts Lane; Footpaths FB 158 20 From Lodge Farm Road to Wick Lane and 158 21 From Dead Lane to FB 158 20 (Part 2, 3.4).
	Green Space: Woodlands attached to Birch Wood (Part 2, 3.4).
	Business Impact : Case Study 1 Genuinely You Ltd; Case Study 2 Skylark; Case Study 3 Jack Rabbit Brewing Company; Case Study 5 Ardleigh Caravan and Camping Park (See Part 2, 5).
	Historic Environment: Proximity to listed buildings. Non-designated heritage assets at risk.
	Visible from scheduled monument (1002146). Close proximity to St. Mary's Church, Ardleigh (1112060).
TB016 (Close to Ardleigh	Harm to Birds: various references throughout report to Ardleigh reservoir including section 2, 2.2.
Reservoir and Wick Lane)	Public Rights of Way: Footpaths FB 158 20 From Lodge Farm Road to Wick Lane and 158 21 From Dead Lane to FB 158 20 (Part 2, 3.4).
	Business Impact: Case Study 5 Ardleigh Caravan and Camping Park (See Part 2, 5).
	Historic Environment: Proximity to listed buildings. Non-designated heritage assets at risk.
TB017 (Close to Wick Lane)	Public Rights of Way: Footpaths FB 158 20 From Lodge Farm Road to Wick Lane and 158 21 From Dead Lane to FB 158 20 (Part 2, 3.4).
	Historic Environment: Proximity to listed buildings. Non-designated heritage assets at risk.
TB018 (Close	Public Rights of Way: Footpath 158 19 from Wick Lane (near to Wick Farm) to Crown Lane
to Wick Lane and proposed	North. Close to proposed County Park (Part 2, 3.4).
Country Park)	Business Impact : Case Study 7 Bloomfield Barn Community Activities (See Part 2, 5).
	Historic Environment: Proximity to listed buildings. Non-designated heritage assets at risk.
TB019 (Close to Wick Lane	Public Right of Way : Footpath 158 19 from Wick Lane (near to Wick Farm) to Crown Lane North. Close to proposed County Park (Part 2, 3.4).
and proposed	Business Impact: Case Study 7 Bloomfield Barn Community Activities (See Part 2, 5).
Country Park)	Historic Environment: Proximity to listed buildings. Non-designated heritage assets at risk.
TB020 (Close to Wick Lane, proposed Country Park)	Public Right of Way: Footpath 158 19 from Wick Lane (near to Wick Farm) to Crown Lane
	North. Close to proposed County Park (Part 2, 3.4).
	Business Impact: Case Study 7 Bloomfield Barn Community Activities (See Part 2, 5).
	Historic Environment: Proximity to listed buildings. Non-designated heritage assets at risk.
TB021 (Close	Historic Environment: Proximity to listed buildings. Non-designated heritage assets at risk.
to Wick Lane,	
Old Ipswich Road)	
noau,	

Part 5 Breaches of Holford and Horlock Rules

1 Overview – Holford and Horlock Rules

- 1.5 This section has been written to review National Grid's plans for the routing of Pylons and the siting of substations and shows the Breaches of Holford and Horlock Rules in Ardleigh with reference to National Policy Statement for Electricity Networks Infrastructure (EN-5).
- 1.6 The Holford Rules provide guidance for the routing of overhead transmission lines. The Horlock Rules provide the guidance for new substations and extensions:

Section 2.9.16 of the National Policy Statement for Electricity Networks Infrastructure (EN-5) states that: The Holford Rules – guidelines for the routing of new overhead lines – were originally set out in 1959. These guidelines, intended as a common-sense approach to overhead line route design, were National Policy Statement for Electricity Networks Infrastructure (EN-5) 19 reviewed and updated by the industry in the 1990s, and they should be embodied in the applicants' proposals for new overhead lines.

Of the seven Holford rules, NG have followed none. Of the Horlock guidelines 9 out of 11 have been breached and the remaining two we are unable to comment on due to lack of information. This leads to the conclusion that the Pylon route in the Parish of Ardleigh and the substation (EACN) should not be in the Parish at all. We set out our analysis of compliance with the rules in what follows.

- 1.7 The Parish of Ardleigh lies in the Tendring Plain, The Tendring Plain is a low, relatively flat plateau with extensive arable land use on loamy, sandy and clay soils. Typically, the fields are large and regular. Apart from a few localised clusters of woodlands/copses they are very widely dispersed. As a result, the area has a generally open character and there are frequent wide views in which the small settlements, scattered hedgerow trees, occasional lines of poplars punctuate the low horizons. Small river/stream valleys cutting through the broad plateau have a contrasting enclosed character and more intimate scale. Pylons, high masts and major roads visually interrupt the landscape in parts. xii
- 1.8 The Parish of Ardleigh is rich in Heritage and Archaeology and has been continuously settled since Neolithic times. There is barely a part of the Parish of Ardleigh that does not have some evidence of Archaeology dating from Neolithic through Bronze Age, Iron Age, Roman, Saxon and Mediaeval periods. (EAA90 Report, Essex HER records.)
 - The soil of Ardleigh is also rated as Best Most Versatile (BMV) predominantly Grade1 with some Grade 2 and 3.
 - The Holford Rules simply do not work with the Ardleigh geology/geomorphology, archaeology, the rural settlement pattern and quality of agricultural land.

The Parish of Ardleigh is simply the wrong choice for this project.

2 Overview- Holford Rules

- 2.5 Lord Holford, advisor to the Central Electricity Generating Board (CEGB), a predecessor organisation to National Grid, developed a series of planning guidelines in 1959, which have subsequently become known as the "Holford Rules". National Grid revised these rules in the 1990's, and they are incorporated in National Policy Statement EN-5 at section 2.8.6.
- 2.6 The Holford Rules form the basis upon which the decision making process of siting overhead transmission (OHT) lines, and minimising the potential landscape impact of such infrastructure.
- 2.7 The Rules are used by National Grid in England and Wales, and Scottish Power Networks and Scottish Hydro in Scotland.
- 2.8 The rules are designed to be used as a hierarchy, but it should be noted that they are designed for the routing of overhead lines once the decision to use overhead lines has been taken, they do not justify the use of overhead lines.

3 Review of National Grid's proposals against the Holford Rules

Rule 1 - Avoid altogether, if possible, the major areas of highest amenity value, by so planning the general route of the first line in the first place, even if the total mileage is somewhat increased in consequence.

3.5 NG provide the following supplementary notes for England and Wales:

"Investigate the possibility of alternative routes, avoiding if possible the areas of the highest amenity value. The consideration of alternative routes must be an integral feature of environmental statements. Areas of highest amenity value are: Areas of Outstanding Natural Beauty, National Parks, Heritage Coasts, World Heritage Sites"

However, in Scotland this same rule is interpreted more stringently with SPN providing the following notes: "This is the basic guidance that multiple routes should be considered as an integral part of environmental statements. Rule 1 also implies an obligation to protect areas designated for, or otherwise recognised as being of the highest amenity value. This rule also obliges consideration of alternative routes that avoid such protected sites, even if the proposal is direct replacement of existing structures and transmission lines that presently run through protected areas. Areas to be avoided include:

- Schedule of Ancient Monuments
- Protected Coastal Zone Designations
- Special Area of Conservation
- Special Protection Area
- Ramsar Site
- National Scenic Areas
- National Parks
- National Nature Reserves
- Sites of Special Scientific Interest (SSSI)
- Listed Buildings
- Conservation Areas World Heritage Sites (non-statutory designation)
- Historic Gardens and Designed Landscapes (non-stat designation)"

3.2 By planning the overall Pylon Route from Norwich to Tilbury and diverting from the main route to the proposed site of the NG East Anglian Connection Node (EACN) in Ardleigh the Pylon route crosses the Dedham National Landscape on the northern boundary of the Parish of Ardleigh, thus breaking a fundamental Holford rule of not avoiding a National Landscape. In the first NG Consultation, to avoid this breach of Rule 1 NG have used this to justify undergrounding the Pylon route through the Dedham AONB (which is arguably just as damaging but in a different way). They then proposed resurfacing on the AONB boundary continuing the Pylon route into the proposed EACN in Ardleigh and out again to rejoin the main route. In the second Consultation the pylon route from the AONB to the EACN was undergrounded still however leaving the Pylon route from the EACN to the main route.

This in itself also breaches National Policy Statement EN 5 section 2.9.12

However, in nationally designated landscapes (for instance, National Parks, The Broads and Areas of Outstanding Natural Beauty) even residual impacts may well make an overhead line proposal unacceptable in planning terms^{xiii}. (See Section 2.9.20 below for guidance on this case.)

The pylon route TB001 from the EACN to Horkesley TB034 is less than 1.5km from the borders of the Deham Vale AONB (National Landscape) and is very visible from deep within the National Landscape this is far more than residual impact. EN-5 goes on to say in 2.9.20 & 2.9.21:

2.9.20 Although it is the government's position that overhead lines should be the strong starting presumption for electricity networks developments in general, this presumption is reversed when

proposed developments will cross part of a nationally designated landscape (i.e. National Park, The Broads, or Area of Outstanding Natural Beauty).

2.9.21 In these areas, and where harm to the landscape, visual amenity and natural beauty of these areas cannot feasibly be avoided by re-routing overhead lines, the strong starting presumption will be that the applicant should underground the relevant section of the line.

It is quite clear that TB001 – TB034 must be undergrounded or an alternative route found including offshore.

We can only conclude that Rule 1 has been breached because NG have planned a route to go through an AONB. By siting the EACN in Ardleigh they breached Rule 1 by introducing Pylons very close to an AONB and into a Parish which contains:

- Scheduled Ancient Monuments
- Sites of Special Scientific Interest (SSSI)
- Listed Buildings
- Conservation Areas

All of which are negatively impacted by the proposed Pylons. Rule 2 - Avoid smaller areas of high amenity value, or scientific interests by deviation; provided that this can be done without using too many angle towers (ie the more massive structures which are used when lines change direction).

- 3.3 NG provide notes: "Some areas (e.g. Site of Special Scientific Interest) may require special consideration for potential effects on ecology (e.g. to their flora and fauna). Where possible choose routes which minimise the effects on the setting of areas of architectural, historic and archaeological interest including Conservation Areas, Listed Buildings, Listed Parks and Gardens and Ancient Monuments". The guidance in Scotland is more stringent: "Whilst smaller areas of amenity value may not be encompassed in designated sites as listed above, they should also be avoided where possible. Effects on the settings of historic buildings and other cultural heritage features should be minimised".
- 3.4 The Parish of Ardleigh contains:
 - 71 Historic listed buildings all of which are of historic and architectural significance
 - a Conservation Area which is the mediaeval heart of the Village and which contains 18 of the listed buildings
 - areas of SSSI within the Parish
 - several designated Protected Greenspaces and designated Green Spaces as part of the Neighbourhood Plan, (awaiting referendum, expected 12 September 2024)
 - a Scheduled Monument which has the largest Bronze Age burial ground found in the UK and Roman and Saxon remains
 - multiple HER Polygons showing HER sites and numerous archaeological finds in and around the Pylon route
 - two Roman roads that are crossed by the Pylon lines and converge on the site of the EACN

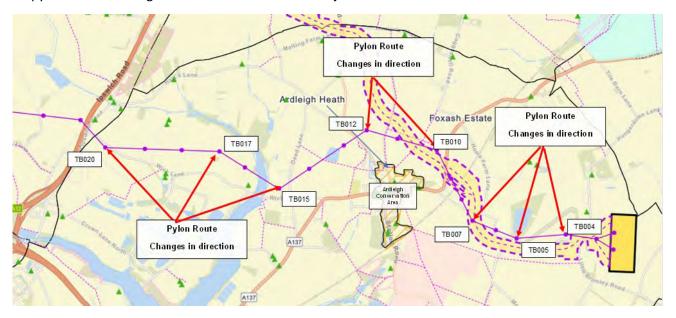
All of these features are compromised to a greater or lesser degree by the Pylon route.

We can only conclude that the proposal breaches Rule 2 in almost every respect and there is no reasonable mitigation.

Rule 3 - Other things being equal, choose the most direct line, with no sharp changes of direction and thus with fewer angle towers.

3.5 NG's notes on this rule states: "Where possible choose inconspicuous locations for angle towers, terminal towers and sealing end compounds".

It can be seen from the map below that the purple line of the route through the Parish of Ardleigh has 8 sharp changes of direction in order to avoid the village yet surround it on three sides. This approach takes 18 pylons when a straight line over 4.5km would take just 13.

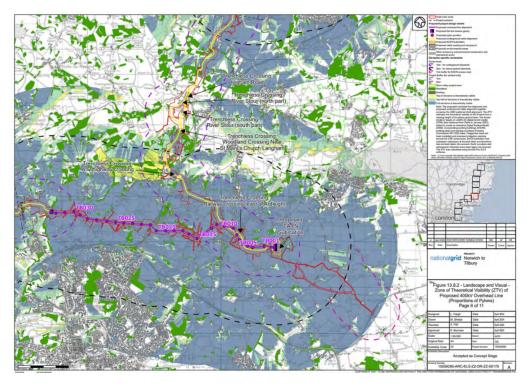


This Map shows 8 changes of direction for 18 pylons over a straight line distance of 4.5km – Straight line would require 13 Pylons @1 per 360m

We can only conclude, as the map clearly shows, that Rule 3 has been seriously breached. An initial study of the proposed positioning of the EACN should have indicated that it would be impossible to route cable from the EACN to rejoin the main pylon route in anything like a straight line. For this reason, this route should not have been proposed.

Rule 4 - Choose tree and hill backgrounds in preference to sky backgrounds wherever possible; and when the line has to cross a ridge, secure this opaque background as long as possible and cross obliquely when a dip in the ridge provides an opportunity. Where it does not, cross directly, preferably between belts of trees.

3.6 The below map shows the visibility of the Pylon Route through the Parish of Ardleigh and beyond. The blue areas of the map shows that the full structure of the pylons is visible for at least 5km and in some cases considerably more in most directions and is clearly visible from deep into the Dedham AONB.



This map is 13.8.2 from PEIR Volume 3 it shows the Landscape and Visualisation Zone of Theoretical Visibility (ZTV) of the proposed 400KV Overhead Line. (pages 6 of 11)

The whole of the Tendring Peninsula is a flat plateau with sparse coverage of woodland and is famous for its big sky backgrounds. It is not possible comply with Rule 4 in this location and it should therefore never have been chosen as a possible route.

Rule 5 - Prefer moderately open valleys with woods where the apparent height of towers will be reduced, and views of the line will be broken by trees.

3.7 Both NG and SPN give similar notes on these two rules: NGT "Utilise background and foreground features to reduce the apparent height and domination of towers from pan viewpoints. Minimise the exposure of numbers of towers on prominent ridges and skylines. Where possible avoiding cutting extensive swathes through woodland blocks and consider opportunities for skirting edges of copses and woods. Protecting existing vegetation, including woodland and hedgerows, and safeguard visual and ecological links with the surrounding landscape". SPN "Rules 4 and 5 suggest that both background and foreground features be utilised to mask or minimise the appearance and impact of the infrastructure, where the existing ground features afford opportunity. The exposure of lines and pylons on ridges should be minimised. Where possible, follow areas of open space, running alongside (but not though) existing wooded areas, including skirting edges of copses and small plantations. Where there is no reasonable alternative, to cutting through woodland, the Forestry Authority Guidelines should be followed".

As with Rule 4 none of Rule 5 is achievable in Ardleigh. The route is in breach of Rule 5 and should not have been chosen.

Rule 6 - In country which is flat and sparsely planted, keep the high voltage lines as far as possible independent of smaller lines, converging routes, distribution poles and other masts, wires and cables, so as to avoid a concentration or 'wirescape'.

3.8 NGET: "In all locations minimise confusing appearance. Arrange wherever practicable that parallel or closely related routes are planned with tower types, spans and conductors forming a coherent appearance; where routes need to diverge, allow where practicable sufficient separation to limit the effects on properties and features between the lines". SPN: "In all locations, minimise confusion by mixing cable and support types. Avoid concentrations where possible, in order to avoid the cable runs dominating the landscape character.

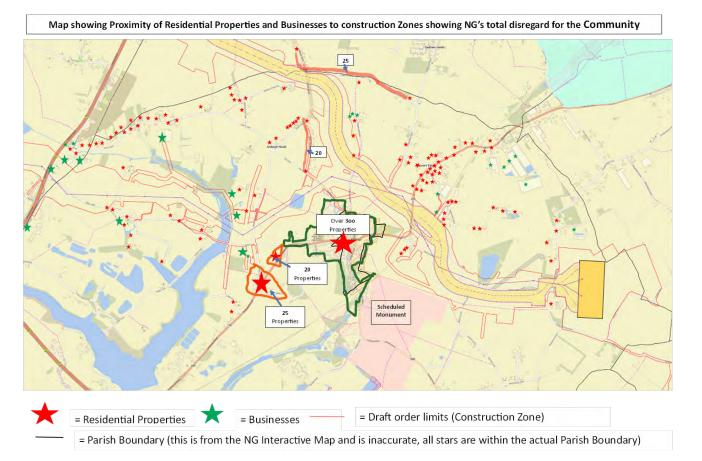
Wherever possible and practicable, parallel or closely related routes should be arranged to provide a coherent appearance. Where diverging routes allow, sufficient separation should be planned to limit the effects on properties and features within the cable lines".

3.9 With lines running into the EACN, an existing local UK Power Networks substation close by and the multiple changes in direction it is impossible for the array of cables not to be a confusing mass of "wirescape". This is illustrated in the recent ESNP landscape report. The overall result would be power lines radiating in 6 different directions from the EACN substation area (including the underground section). For reference the map is: Sheet 7 from "App 01-Part 10-OTHER POWER LINES MAP SET" from the "Norwich to Tilbury High-Level Landscape Susceptibility Appraisal" produced by The Landscape Partnership.

Our conclusion is that there has been complete disregard for Rules 1 – 5 which leaves NG little room to manoeuvre resulting in Breach of Rule 6.

- Rule 7 Approach urban area through industrial zones, where they exist; and when pleasant residential and recreational land intervenes between the approach line and the substation, go carefully into the comparative costs of the undergrounding, for lines other than those of the highest voltage.
- 3.10 NG and SPN provide similar notes, although yet again, Scotland appears to be more stringent with regard to preserving the visual environment. NG "When a line needs to pass through a development area, route it so as to minimise as far as possible the effect on development. Alignments should be chosen after consideration of effects on the amenity of existing development and on proposals for new development. When siting substations take account of the effects of the terminal towers and line connections that will need to be made and take advantage of screening features such as ground form and vegetation". SPN "Should lines be required to pass through development areas, the course should be carefully selected to minimise the effects on the development as far as is practicably possible. Undergrounding should be considered as a realistic alternative in order to minimise impact where there is little alternative. Alignments should be chosen after consideration of the effects of the infrastructure on proposals for new development. When siting substations, the effects of terminal towers should be considered in order to take advantage of screening opportunities such as ground form and vegetation".
- 3.11 As can be seen from the Map below the route taken by NG threads its way through the Parish and Village of Ardleigh with Pylons and Draft order limits up against or within a few metres of fishing lakes, Allotment, the Cemetery, Green Spaces, Residential Properties, Businesses, Landscape Beauty spots etc.

No regard whatsoever has been taken of the negative effect on every aspect of residents' lives, wellbeing and mental health. The map below shows the proximity of properties to the construction Zone and Pylon lines and illustrates NG's contempt for the Holford Rules.



4 Horlock Rules (for the Siting and Design of Substations)

- 4.5 The Horlock Rules were devised in 2003 and updated in 2006 by National Grid Company (NGC) plc. The Horlock Rules provide guidelines for the siting and design of new substations, or substation extensions, to avoid or reduce the environmental effects of such developments.
- 4.6 The Horlock Rules follow the principles of the Holford rules and therefore comments and conclusions may be cross referenced to them. Each of the Horlock Rules Guidelines is listed and reviewed for Ardleigh below.
- 4.7 **Guideline 1 Overall System Options and Site Selection** In the development of system options including new substations, consideration must be given to environmental issues from the earliest stage to balance the technical benefits and capital cost requirements for new developments against the consequential environmental effects in order to keep adverse effects to a reasonably practicable minimum. Amenity, Cultural or Scientific Value of Sites.

As with the Holford rules NG have taken little or no account of the consequential environmental effects of the substation. Amenity, Cultural and Scientific and Scientific Value of sites are ignored or dismissed. A catch all phrase used by NG even where harm is identified is that is is "of no great significance" this is unsubstantiated as there are no criteria by which to judge this assessment.

We conclude that guideline 1 is breached

4.8 **Guideline 2** The siting of new NGC substations, sealing end compounds and line entries should as far as reasonably practicable seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connections.

Notes: 1 Internationally and nationally designated areas of highest amenity, cultural or scientific value are: National Parks; Areas of Outstanding Natural Beauty; Heritage Coasts; World Heritage Sites; Ramsar Sites; Sites of Special Scientific Interest; National Nature Reserves; Special Protection Areas; Special Areas of Conservation. Notes 2 Care should be taken in relation to all historic sites with statutory protection eg Ancient Monuments, Battlefields and Listed Buildings. Notes 3 Account should be taken of Government

Planning Policy Guidance and established codes of practice. Notes 4 Account should be taken of any development plan policies relevant to the siting or design of substations.

As Ardleigh borders the Dedham AONB it is impossible to mitigate against the adverse visual impact of the Pylons entering the EACN and the EACN itself as explained under the Holford rules section.

The proposed EACN site very close to a Scheduled monument and there is evidence of Archaeology on the site including where two Roman Roads converge. Not only will the construction of the EACN (and the two Wind Farms and Tarchon interconnector) cause the loss of irreplaceable Archaeology it will also destroy forever the unique landscape of one of the largest Bronze Age burial sites found.

Ardleigh is a Mediaeval Village and the Parish is mentioned 5 times in the Domesday Book. The presence of the Pylons and substations will destroy the essence of their ancient village. The Village centre is a Conservation area and contains 17 Grade II listed buildings and at total of 71 throughout the Parish several which are either touching the construction Zone of the EANC or are very close. The Parish also contains a number of SSSI's

Conclusion: Guideline 2 is breached

4.9 **Guideline 3** Areas of local amenity value, important existing habitats and landscape features including ancient woodland, historic hedgerows, surface and ground water sources and nature conservation areas should be protected as far as reasonably practicable. The site of the EACN is on grade 1 BMV agricultural land and access to the site is on very narrow lanes with ancient hedgerows which are important habitats for all types of wildlife. It will not be possible to access the EACN site without destroying these habitats.

Our conclusion, therefore, is that Guideline 3 is breached

4.10 **Guideline 4** The siting of substations, extensions and associated proposals should take advantage of the screening provided by land form and existing features and the potential use of site layout and levels to keep intrusion into surrounding areas to a reasonably practicable minimum.

Notes: 1 A preliminary study should be undertaken to identify the extent of land required to meet both operational and environmental needs. 2 In some instances it may be possible to site a substation partially or fully enclosed by existing woodlands. 3 Topographical information should be obtained at an early stage. In some cases a geotechnical survey may be required.

See our above comments on Holford Rules 4 & 5. For the reasons explained it is not possible to adequately screen the EACN through the use of the landscape.

Guideline 4 is therefore breached

4.11 **Guideline 5** The proposals should keep the visual, noise and other environmental effects to a reasonably practicable minimum.

Notes: 1 Allow sufficient space for screening of views by mounding or planting. 2 Consider appropriate noise attenuation measures where necessary. 3 Use security measures which minimise visual intrusion from lighting. 4 Consider appropriate on-site water pollution prevention measures. 5 Consider adjoining uses and the amenity of local inhabitants.

We do not feel able to comment as National Grid does not appear to have addressed this in the documentation provided and the proposed measures not apparent.

4.12 **Guideline 6** The land use effects of the proposal should be considered when planning the siting of substations or extensions.

Notes: 1 Issues for consideration include potential sterilisation of nationally important land, eg Grade 1 agricultural land and sites of nationally scarce minerals. 2 Effects on land drainage.

The proposed EACN site is Best Most Versatile (BMV) Grade I prime agricultural land.

It is also on a site which has valuable and scarce minerals including silica sand. The British Geological Survey Commissioned a Report CR/02/127N which shows a map of mineral resources across Essex and includes the

Parish of Ardleigh. The map shows that most of the Parish including the site of the EACN and part of the Pylon and Underground cable route are on deposits of Glacifluvial sand and gravel (including Kesgrave Formation) These sites have been put forward as possible sites for extraction in the past and there are two sites crossed by Pylons and undergrounding which are currently under consideration as part of the Essex Local Minerals Plan. Our Parish Council opposes such extraction in Ardleigh, however, the NG proposals would rule it out now and for future generations.

Guideline 6 is Breached

4.13 **Guideline 7** In the design of new substations or line entries, early consideration should be given to the options available for terminal towers, equipment, buildings and ancillary development appropriate to individual locations, seeking to keep effects to a reasonably practicable minimum.

Notes: 1 With outdoor equipment, a preference should be given normally to a low profile design with low height structures and silhouettes appropriate to the background. 2 Use lightweight narrow section materials for taller structures especially for gantries over about 6 metres in height. 3 Commission exterior design and colours appropriate to the surroundings. 4 Materials and colours for buildings, equipment and fencing should be chosen to harmonise with local surroundings. 5 Where possible avoid the use of prominent insulators by consideration of available colours appropriate to the background. 6 Where possible site buildings to act as visual screens for switchgear.7 Ensure that the design of high voltage and low voltage substations is co-ordinated by early consultation between NGC and its customers. 8 Where there are particular technical or environmental constraints, it may be appropriate to consider the use of Gas Insulated Switchgear (GIS) equipment which occupies less space and is usually enclosed within a building. 9 Early consideration should be given to the routing of utility service connections.

We have no indication that any special design features have been employed to mitigate against its intrusion into a flat rural landscape.

Guideline 7 breached.

4.14 **Guideline 8** Space should be used effectively to limit the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way, whilst also having regard to future extension of the substation. Notes:1 Assess the benefit of removing redundant substation equipment from existing sites where this would improve their appearance.

We have no indication that any measures have been taken to minimise the adverse effects on existing land use and rights of way

Conclusion: Guideline 8 breached

4.15 **Guideline 9** The design of access roads, perimeter fencing, earthshaping, planting and ancillary development should form an integral part of the site layout and design to fit in with the surroundings.

We have no indication that any measures have been taken to form an integral part of the site layout and design to fit in with the surroundings.

Conclusion: Guideline 9 is breached

4.16 Line Entries **Guideline 10** In open landscape especially, high voltage line entries should be kept, as far as possible, visually separate from low voltage lines and other overhead lines so as to avoid a confusing appearance.

We can find no evidence that this guideline has been addressed.

4.17 **Guideline 11** The inter-relationship between towers and substation structures and background and foreground features should be studied to reduce the prominence of structures from main viewpoints. Where practicable the exposure of terminal towers on prominent ridges should be minimised by siting towers against a background of trees rather than open skylines.

See Holford rules 4&5.

Conclusion Guideline 11 is breached

Part 6 Consultation flaws and concerns

1 Consultation flaws overview

- 1.1. Of all the Parishes on the route of the N2T project the Ardleigh is the most adversely affected and yet the level of engagement from NG during three consultations has been shockingly inadequate.
- 1.2. Ardleigh Parish Council supports the view of the Essex Suffolk Norfolk Action Group that "The entire consultation process has been legally deficient since day 1." This requires consideration of the principles espoused by Stephen Sedley QC in *R v Brent London Borough Council, Ex.p Gunning (1985) 84 LGR 168* in which the Court endorsed Mr. Sedley's four essential "basic requirements" for fair and sensible consultation. These are referred to as the "Gunning Principles" and have been re-stated and accepted by the Courts since the Gunning case, most notably by the Supreme Court in *R (Moseley) v Haringay London Borough Council [2014] UKSC 56; [2014] 1 WLR 2947.* What follows sets out the Parish Council's analysis and concerns as to the compliance of this consultation with the *Gunning Principles* and also the guidance found in the Treasury Green Book. For the avoidance of doubt, the Parish Council considers this non-compliance to be deliberate and cynical.
- 1.3. The four Gunning Principles can be summarised as follows:
 - Consultations must occur while proposals are still at a formative stage.
 - Sufficient information needs to be supplied for the public to give the consultation 'intelligent consideration'.
 - There needs to be an adequate time for the consultees to consider the proposal and respond.
 - Conscientious consideration must be given to the consultation responses before decisions are made.
- 1.4. In essence, public consultations need to take place at a formative stage and certainly <u>before</u> any final decisions are made by the body consulting ("the decision maker"), information should be readily available in accessible language, consultees should have time to give a considered response, and decision makers should be able to provide evidence that consultation responses have been taken into account. In the following, the Parish Council sets out some of the <u>significant</u> breaches of the *Gunning Principles* that it considers to have arisen in this current consultation.

2 Gunning Principle 1: Consultation at Formative stage

- 2.1 When Ardleigh residents first heard about what was then called "East Anglia Green" they were provided with maps which showed the purple swathe of the proposed pylon route from Norwich to Tilbury with a diversion in and out of Ardleigh to create a massive substation. It is clear that these proposals were anything but formative ones. The route through, and substation at, Ardleigh had been predetermined before any consultation. No alternative options of any description were put forward, if they were even considered in any detail. This was clearly in breach of Gunning Principle 1
- 2.2 At the first consultation events the Parish Council and residents asked National Grid why a substation was being proposed in Ardleigh and what alternatives had been considered. The answer seemed to be that the wind farms Five Estuaries and North Falls wanted to bring the energy ashore in Tendring and that determined where the Substation would be. There was no suggestion that alternative landing points were being considered and any suggestion that alternatives could be considered were dismissed out of hand, without reasons.
- 2.3 During the first consultation it became apparent from the work done by the emerging Essex Suffolk Norfolk action group that there was an alternative to pylons which had been looked at in report produced by NG some years earlier. This proposal was for an offshore grid and was clearly less expensive and damaging than the pylons proposed then and now. When NG representatives were asked about this option by Ardleigh residents they were told it was not technically possible. This is palpably untrue from the information seen and considered by the Parish Council and no detailed reasoning has been provided by NG.
- 2.4 At subsequent consultations, despite it being proved that an offshore solution is possible, NG refused to offer any options other than Pylons, on the same route and some limited undergrounding through

the Dedham AONB and from there to the Ardleigh EACN Substation. By the time of the third consultation NG (falsely) claimed this was always their intention.

2.5 After the first consultation Five Estuaries held a consultation; where when asked, they said they were only connecting to a substation in Ardleigh (which would then connect to the EACN), because that was where NG had <u>told</u> them to go. They also told us that it would be easier for them, and probably cheaper, to connect to a grid offshore. This, they said, was obviously technically possible as they must run undersea cables from the windfarms to go onshore.

3 Gunning Principle 2: Sufficient information to given to the public for intelligent consideration

- 3.1 There are several problems with this part of the process
 - Events were held at several locations to impart information however, over the three consultations none have been held at the Village Hall in Ardleigh itself, the most affected Parish. NG were asked why during the first consultation and were told that:
 - The hall wasn't big enough, despite being bigger than the other nearest locations in Langham and Lawford.
 - o Parking was an issue, in spite of the Village Hall having access to overspill parking for several hundred cars.
 - Booking was a problem despite the hall being available when events were held at other locations.
 - We added comments and a request to come to Ardleigh in both of our previous responses concluding with '...our Village Hall was available and suitable. We continue to call for direct opportunities for Ardleigh residents to be consulted within our parish. We are certain that residents were put off or prevented from attending the Lawford event because of the clash with the Tendring Show. Next time please come to Ardleigh, we will actively facilitate this if you involve us. (original emphasis)xiv
 - The locations the events were held in were inaccessible by public transport, often open weekdays during working times, excluding many working people.
 - This meant that, without good or true reasons, many residents were not able to attend events and therefore did not have access to sufficient information.
 - Those events that were held had NG staff in attendance to allegedly answer questions. However, many seemed to have only a rudimentary knowledge of what the project entailed. It was not uncommon for attendees leaving the events to be angry and upset at the lack of knowledge of the NG staff and the use of stock answers. For example, asked why one pylon adjacent to a fishing lake had been moved when others by another lake had not the answer was "we take everything into consideration and the decision is always a balance."
 - Parishioners report evasive answers and being given different answers to the same question by different NG staff.
- 3.2 Other than events the information on proposals has not been easily or readily accessible:
 - Information online has been in huge documents, some as big as nearly 3000 pages long. Not only
 are the documents so big that domestic computers struggle to open them, but the indexing is so
 inadequate or non-existent that ordinary residents cannot find anything or even know what is in the
 documents.
 - No easy to use (if any) search facility has been provided to assist in identifying relevant documents.
 One has to scroll through a list of documents, often with unilluminating and overly technical (read here "meaningless") file names.
 - The maps included in the documents of which there are hundreds are large scale AO size and very

difficult to understand. The interactive map has a yellow background with details shown in different shades of yellow or pale pastels. The location of specific houses in relation to the proposed construction work is difficult to identify. For an open meeting held by Ardleigh Parish Council NG maps had to be individually annotated by the council to be able to explain to those who attended what was happening.

- Indexes to the symbols on the maps are inconsistent across different maps making it very difficult for the average person to understand.
- Explanations of some of the terms used are obscure or hidden away in generally inaccessible documents.
- There are dozens of maps showing the work in Ardleigh and you simply cannot say that the information that is accessible is sufficient or clear.
- Information was only sent to some householders within 1km of the pylon line, when the visual impacts of the project are far wider
- Internet access is required to fully access the proposals and their supporting information and of course not everyone has access or the skills to use it. This is likely to be particularly true in respect of Ardleigh's older residents. NG does not appear to have had due regard to its Public Sector Equality Duty, found at s.149 of the Equality Act 2010 in its consideration as to how to run this consultation.
- The accuracy of the maps available for consultation has been questioned. For example, the Parish Boundary in Ardleigh on the west of the Parish adjacent to the A12 is in the wrong position showing properties as being outside the Parish when they are within it.
- In Ardleigh we have several residential properties that are either within or very close to Draft Order limits. Despite attempts by residents to engage with NG there has been no personal engagement with homeowners who are gravely affected.

4 Gunning Principle 3: adequate time for the consultees to consider the proposal and respond.

- 4.1 Because of the way NG has presented information in inaccessible documentation and the lack of knowledgeable staff at events there simply isn't enough time to respond properly. This is clearly a deliberate well-orchestrated approach to make it as difficult as possible for residents and Parish Councils to respond.
- 4.2 Some of the documentation includes technical information which without expert assistance and input is almost impossible to respond to. For example, there are tables that list the decibel output of every imaginable type of construction vehicle at varying distances. The conclusion is that the impact is not significant however, the data seems to refer to actual damage to hearing not the mental health impact on residents of continuous and variable noise levels for at least 12 hours a day. The Parish Council does not have the time or the financial resources to challenge this plethora of apparent expert opinion. Generally, all the detailed reports on, Archaeology, Habitats, Environment, Landscapes etc. draw the same conclusion that there is limited or insignificant harm but how can they be properly, and expertly, considered within the confines of the consultation period. This consultation appears to be a "box-ticking" exercise. The conclusion is foregone and the opportunity to challenge the technical material advanced in support of NG's only preferred option is negligible. This will (undoubtedly) lead to expert evidence to be commissioned and advanced at the examination stage, when with more time and clear explanation, such material could be advanced at the consultation (and formative) stage.

5 Gunning Principle 4: Conscientious consideration must be given to the consultation responses before decisions are made.

5.1 We have produced two previous responses to the consultations. Each one has raised specific questions on the harms that Ardleigh will experience. There is no evidence in the current consultation that <u>any</u> of the responses have been properly considered, taken into account or addressed. Had they been, the Parish Council considers that more engagement with those affected would have arisen prior to the

current consultation. This has not happened.

5.2 Our Parish Council has had no direct or meaningful response from National Grid to any of the issues raised. There has been no targeted attempt to engage with us to seek clarification or to explain the NG position. For example, we have made NG aware from the outset that the proposed route of part of the Pylons and now undergrounding crosses two fields which are adjacent to the Scheduled Monument which contains the largest Bronze Age Burial Ground found in the UK and Neolithic, Roman and Saxon remains. We have also made NG aware that two Roman Roads actually intersect on the proposed site of the EACN substation. This has not been addressed by NG.

5.3 In addition:

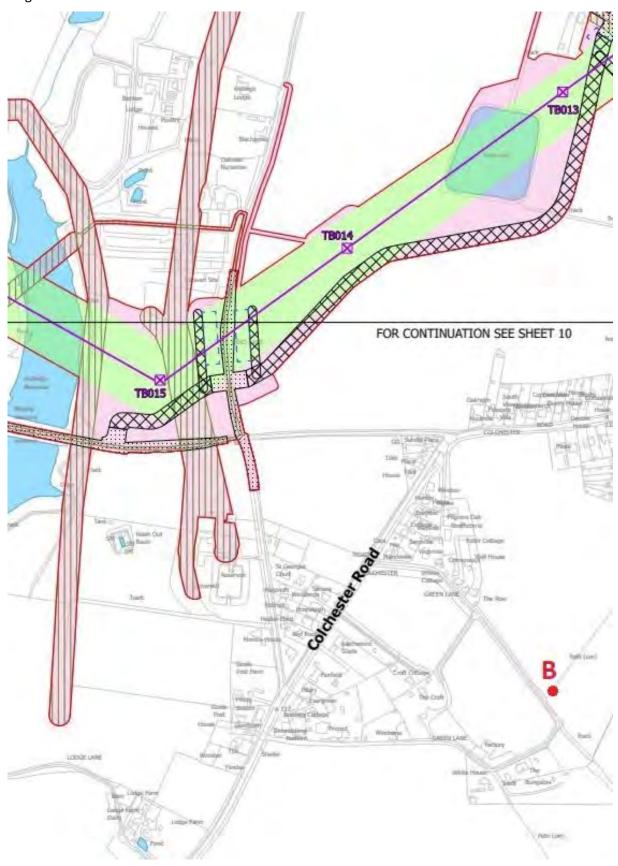
- We have highlighted the damage to our agricultural community many of whose businesses will be fatally damaged by the proposals. NG have once again failed to address this.
- Homeowners do not feel the issues they have raised in feedback to previous consultations have been addressed. Homeowners seek personal engagement given the life changing impact of these proposals.
- The impact of the proposals on property prices has not been assessed. This is an important omission in the process.
- National Grid has made no attempt to assess the impact of the proposals on mental health and wellbeing. This is an important omission in the process.
- National Grid do not seem to be aware of the presence of businesses in the area and have not assessed the impact upon them.
- 5.4 In conclusion, we agree with the overall assessment of the flaws in the Consultation Process which is in the ESNP action Group Submission and suggest that Ardleigh has been deliberately ignored in the consultation to process in attempt to reduce the impact of the objections to the entire proposal but in particular to the Harms being imposed on the Parish of Ardleigh.
- 5.5 We currently have no faith in this process and suggest it is stopped until all options have been properly considered.

6 Requests for additional information

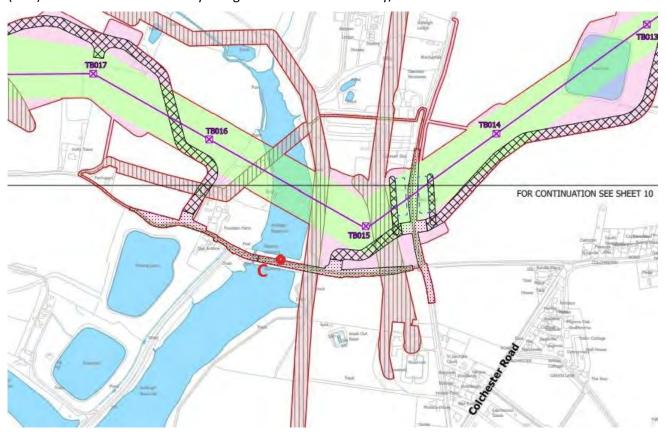
- 6.1 We do not consider that National Grid have used appropriate viewpoints for the "Wireline Visualisations". We note that Sir Bernard Jenkin's submission makes a similar point: 'highly selective viewpoints have been chosen'. We would therefore like to specify additional viewpoints for the Environmental Statement (ES) that will be submitted by NG with the DCO application.
- 6.2 Figure 13.7 shown as Appendix B shows the location of the existing NG "visual receptors" in our area. These are denoted by numbered black triangles, blue dots and grey triangles. The black triangles are "Landscape & Visual (PEIR Wireline and ES Photomontage)", the blue dots "Landscape & Visual and Heritage (PEIR Wireline and ES Photomontage)" and the grey triangles "Landscape & Visual (potential additional / alternative viewpoint locations to consider for ES). Therefore, the blue dots seem to have additional heritage significance and the grey triangles haven't been used yet as they are "potential additional / alternative viewpoint locations to consider for ES".
- 6.3 For the Environmental Statement please add the following visual receptors in the Ardleigh area, to supplement both the existing and the potential additional / alternative viewpoint locations.
- 6.4 Viewpoint A, shown in red in image below, views to cover as a minimum towers TB005 to TB009 (incl.). Point A is just inside the field (clear of the hedge) south of the A137



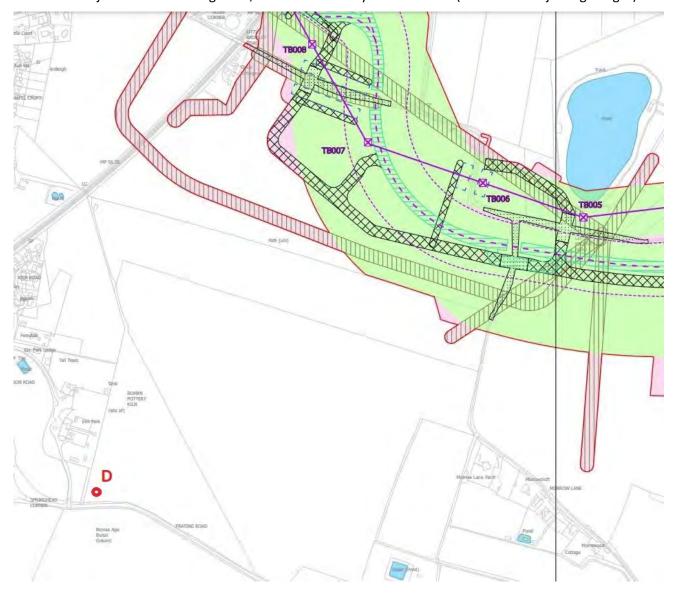
6.5 Viewpoint B, shown in red in image below, views to cover as a minimum towers TB007 (not shown on this section of the map) to TB014 (incl.). Point B is just inside the field (clear of the hedge) along footpath "Ardleigh 5" near to where it meets Green Lane.



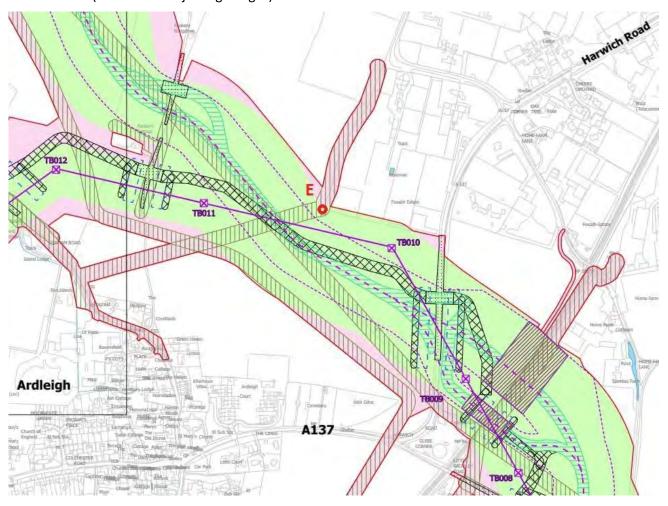
6.6 Viewpoint C, shown in red in image below views to cover as a minimum towers TB013 to TB017 (incl.). Point C is located halfway along the Wick Lane causeway/dam.



6.7 Viewpoint D, shown in red in image below, views to cover as a minimum EACN to TB012 (incl.). Point D is located just north of Frating Road, near the boundary with Elm Park (clear of the adjoining hedges)



6.8 Viewpoint E, shown in red in image below, views to cover as a minimum EACN to TB012 (incl.). Point E is located on the intersection between footpath "Ardleigh 3" and the footpath between Rookery Cottage and the A137 (clear of the adjoining hedges).



6.9 All the above images were derived from "NATIONAL GRID (NORWICH TO TILBURY) S.42 CONSULTATION PLAN SERIES, SECTION C" maps.

Part 7 Mitigations

1. Mitigations

- 1.1 Our Parish Council has given long and serious thought to the mitigations needed for this project at Ardleigh, if it comes forward. Ardleigh is in a unique situation, given the fact that it is the chosen location for the EACN substation. It is because of the location of that substation that significant harms will undoubtedly be caused through the EACN substation itself, the pylons, the North Falls and Five Estuaries substations plus any interconnectors, together with the undergrounding needed.
- 1.2 Insofar as the Parish Council is concerned, the only effective mitigation would be for the project not to proceed and, rather, the alternative option of an offshore link/provision be pursued. Clearly, to do otherwise will require an expensive and expansive mitigation package, some of which will need to be bespoke to Ardleigh, given its particular location and nature of the settlement pursued (see Part 1, 1.6-1.12 above and Part 4 above).
- 1.3 A lesser alternative would involve significant undergrounding and relocation of the EACN substation away from Ardleigh on one of the several brownfield sites situated on or near the coastline in the region, which, in turn, would incur significant disruption to the area and, again, we consider significant mitigation measures that would come at a cost.
- 1.4 Should the proposals go ahead Ardleigh clearly requires a bespoke package of mitigation, that needs to be agreed with the residents and Parish and District Councils (amongst others). Such a discussion needs to be taken at a formative stage of this project (and note the points we have raised in Part 6, surrounding the flaws in the consultation process to date) and should include heads of mitigation to cover:

Environmental, Landscape and Settlement Harms

- a. Transport impacts
- b. Local Noise and Pollution
- c. Detailed (and enforceable) construction management plan
- d. Compensation to affected landowners and to the wider community
- e. Expert/legal assistance in considering and agreeing to such mitigations amongst others.

Ultimately this will require significant engagement with those affected by this proposal within Ardleigh.

Glossary

NG = National Grid

SPN = Scottish Power Networks

EACN = East Anglian Connection Node

EN-5 = National Policy Statement for Electricity Networks Infrastructure

Footnotes and references

https://legacy.tendringdc.gov.uk/sites/default/files/documents/planning/planning%20policy/LandscapeCharacterAssessment2001Vol1.pdf and Vol II:

https://legacy.tendringdc.gov.uk/sites/default/files/documents/planning/planning%20policy/TendringLands capeCharAssessVol2.pdf

¹ Tendring Landscape Assessment - vol I:

[&]quot; https://www.fishe.net/essex/fisheries/ardleigh.php

iii National Grid N2T - Preliminary Environmental Information Report (PEIR) Volume 3 Technical Appendices, 4.2.4 Section C

^{iv}National Policy Statement for Energy 5.10.6

^v National Policy Statement for Energy 5.10.7 240

vi PRoW Interactive Map | Essex County Council (essexhighways.org)

vii https://ardleigh.website/our-plan

viii Health Protection Agency HPA NRPB 2004

ix WHO and JRC, 2011, Burden of disease from environmental noise — quantification of healthy life years lost in Europe, World Health Organization, Geneva, Switzerland accessed 5 May 2014. and WHO, 2018, WHO environmental noise guidelines for the European region, World Health Organization, Regional Office for Europe, Copenhagen accessed 7 December 2018.

^{*}New Food Security Index – 16th May 2024

xi Nationally Significant Infrastructure Projects - Advice Note Seventeen: cumulative effects assessment relevant to nationally significant infrastructure projects

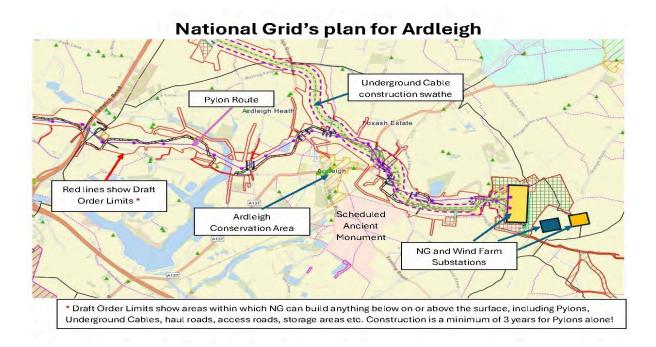
xii 1179902R Essex LCA Final Report_07-02

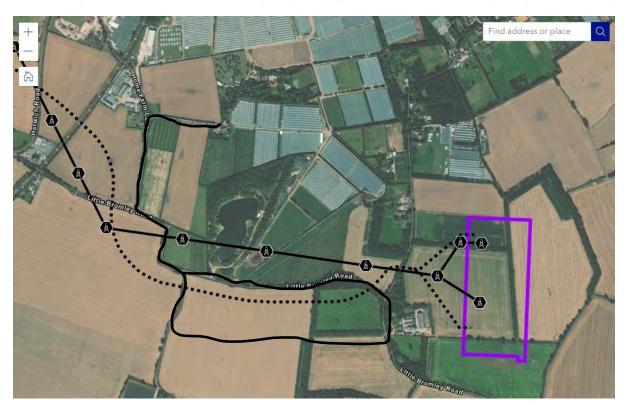
xiii National Policy Statement EN 5 section 2.9.12

xiv Ardleigh Parish Council response to National Grid's Norwich to Tilbury consultation Summer 2023 para 2.11-2.13

Statutory Consultation – Ardleigh Resident Feedback on the environmental impact specifically on the area of Consultation Plan Series Section C Sheet 11 and 12.

Pylons TB01 - TB09 and Underground cab





Black line shows everyday dog walk, from Badliss Hall Lane, along Home Farm Lane and Little Bromley Road, turning onto Morrow Lane and Footpath 28, along to Little Bromley Road and return. Pylons TB01 – TB09



(Footpath 28 in Ardleigh has a approximate length of 758 metres and is in the district of Tendring.)

The walk I have indicated I take at least 2 or 3 times a week. It is a well-used path by local people, who come from the village and surrounding hamlets and will have been an ancient trackway in times past. It is near to the Roman Road. Home Farm Lane, Little Bromley Road and Morrow Lane are narrow but safe to walk. Vehicles need to stop and pull over to allow for passing. There are numerous substantial trees, including native oaks that have been there for well over one hundred years, established hedges and ancient woodland and a pond. There are a variety of birds that can be heard along the way. Hedgehogs live in the area and bats can be seen hunting the farm reservoir. It is a peaceful, beautiful and typical part of North Essex. Equal, in my opinion, to that found in the nearby AONB. Construction of the underground cabling with its 120m swathe, alongside 8 x 50m high pylons, zones for these permanent assets, construction, operation and maintenance, haul roads,

construction compounds and the East Anglia Connection Node Substation, will all completely and irrevocably destroy this piece of countryside, that has remained rural for millennia. It will never be the same again and no amount of mitigation nor 10% biodiversity net gain will ever justify National Grid's reasons for considering this as an option. How can the countryside be reinstated after this destructive, permanent construction, when it has taken hundreds of years to develop.

Should the work commence, I will no longer be able to access this area and nor will many others. I will not be able to walk out of my door and into the nearby countryside and this will be the case for many years to come. The thought leaves me deeply depressed.

The construction phase will destroy any wildlife that exists here, permanently. New data shows that the UK is actually one of the countries in the world where biodiversity is in the worst state. Biodiversity is the variety of all living things on Earth and how they fit together in the web of life, bringing oxygen, water, food and countless other benefits. A study found that that UK is one of the world's most nature-depleted countries, with on average about half its biodiversity left - far below the global average of 75%. It means the UK is in the bottom 10% globally for biodiversity. The effect of 'Norwich to Tilbury' on the biodiversity of the Region is incalculable and should not be contemplated nor its purpose justified.

The loss of agricultural land is also unjustifiable. A major package of measures to support farmers and grow the UK's farming and food sector has been announced by the government today (Tuesday, 14 May, 2024). The balance between food production and moving energy must be on the side of food production, particularly when there are alternative means of transporting the energy. Alternatives that will not involve such utter devastation of the Region's and Ardleigh's farming and countryside.

Whilst on my walk today I heard/saw the following birds:

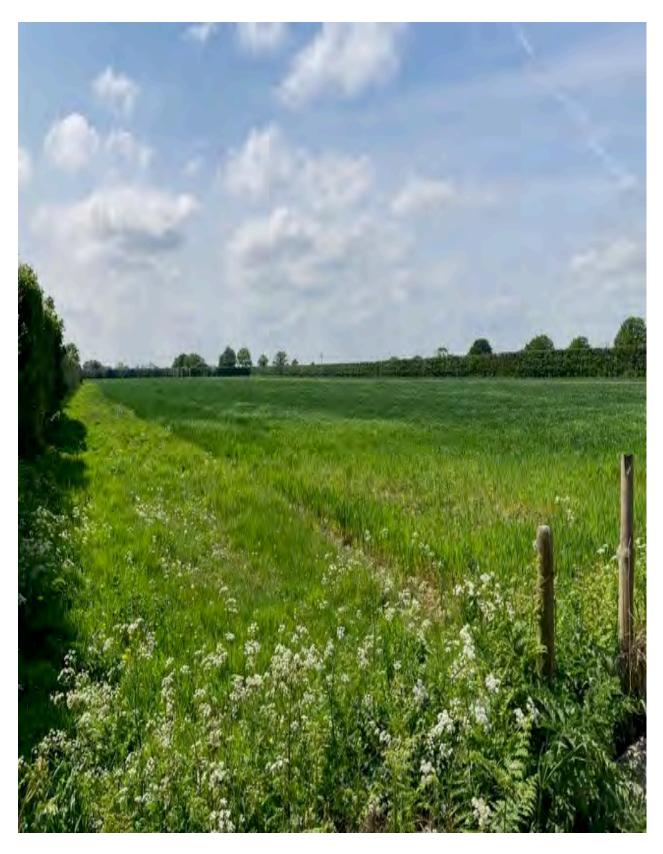
Jay, Skylark – who are nesting in the field which will be destroyed, Wren, Blue Tit, Great Tit, Longtail Tit, Chaffinch, Greenfinch, Blackcap, Chiff Chaff, Robin, Blackbird.

I also spotted some hedgehog poo and have also seen bats hunting around the farm reservoir. The reservoir is also home to moorhens, coots, swans, geese, cormorants, grebes and herons. There are rabbits, foxes, deer and badgers that live in and around the farm and reservoir.

Not only will I lose this walk but I will also not be able to walk down to the village via Home Farm Lane and Little Bromley Road. In order for me to get any exercise I will have to get in my car and drive further afield.

Here are some photos taken on my walk today, 14th May, 2024.

This is a view looking across to what will be at least 5 $\,$ x 50 metre high pylons and their cabling. TB04 -TB08



This shows the difficulty of large lorries trying to use Home Farm Lane. It is impossible to think of the quantity and size of lorries that will be used by National Grid. It will be impossible for those of us that live in this area to access the village of Ardleigh, by our usual routes. TB08-TB09



This shows Little Bromley Road and the fullness of the hedges, trees and the narrowness of the road. These trees and hedges were full of bird song. TB04 -TB08 and cable swathe



This shows a row of oak trees on Little Bromley Road, that must be over 100 years old. TB07 - TB08 and cable swathe



This shows a row of oak trees along Little Bromley Road that will be lost. TB04 - TB08 and cable swathe



One of the substantial oak trees on the corner of Little Bromley Road that must not be lost. TB08 - TB07 and Cable swathe



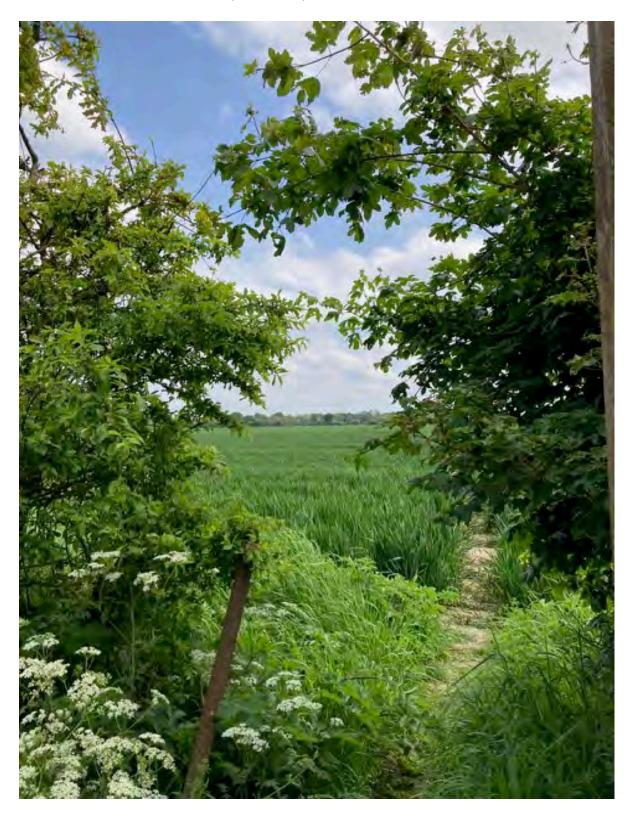
This shows the established trees and hedgerows on Morrow Lane that will be destroyed. TB08 - TB04 and cable swathe



This shows the signpost for Footpath 28. This will be virtually blocked by construction and undergrounding swathe. TB08 - TB04 and cable swathe

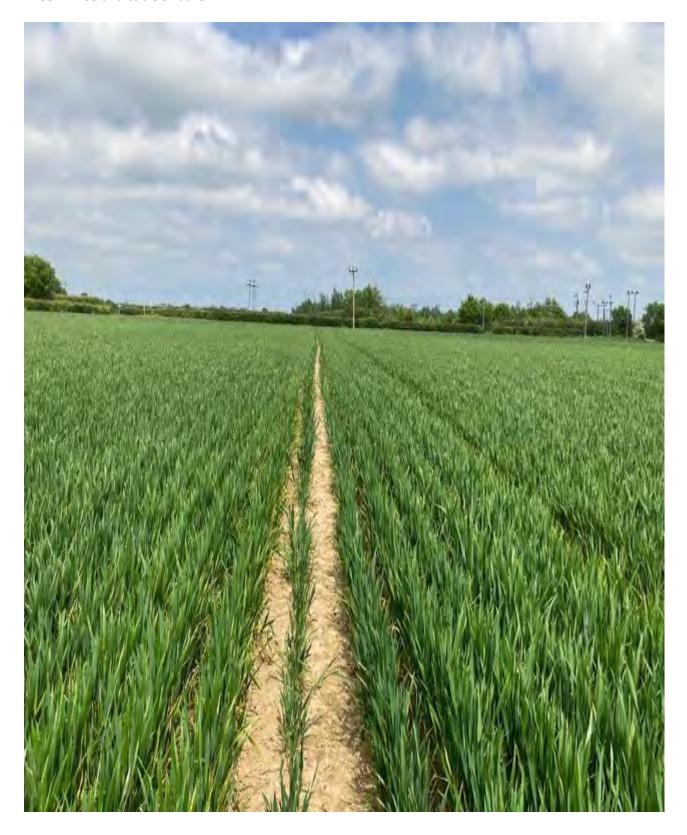


This shows the start of the Footpath 28, as it goes into the field where the main swathe and construction will be. Today all you could hear were skylarks singing and see them fly up from their nests. This view will be obliterated permanently. TB08 – TB04 and cable swathe



Appendix A

This shows Footpath 28 heading towards Little Bromley Road. It will be impossible to walk this path. TB08-TB03 and cable swathe



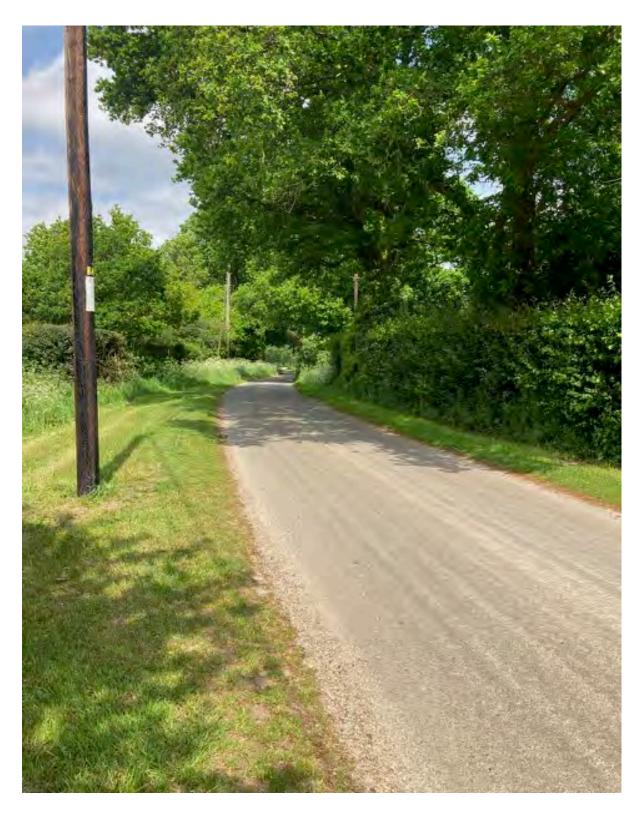
This shows where Footpath 28 comes out onto another field that is edged with a small woodland and a crop field. This is also used for pheasant cover. I assume that the person who runs this business will cease to be able to do so. TB01 – TB05 and cable swathe



This shows where Footpath 28 comes out onto Little Bromley Road. You can see someone walking and a lorry passing by. This area will be surrounded by construction and substations. TB01 - TB04 and substations

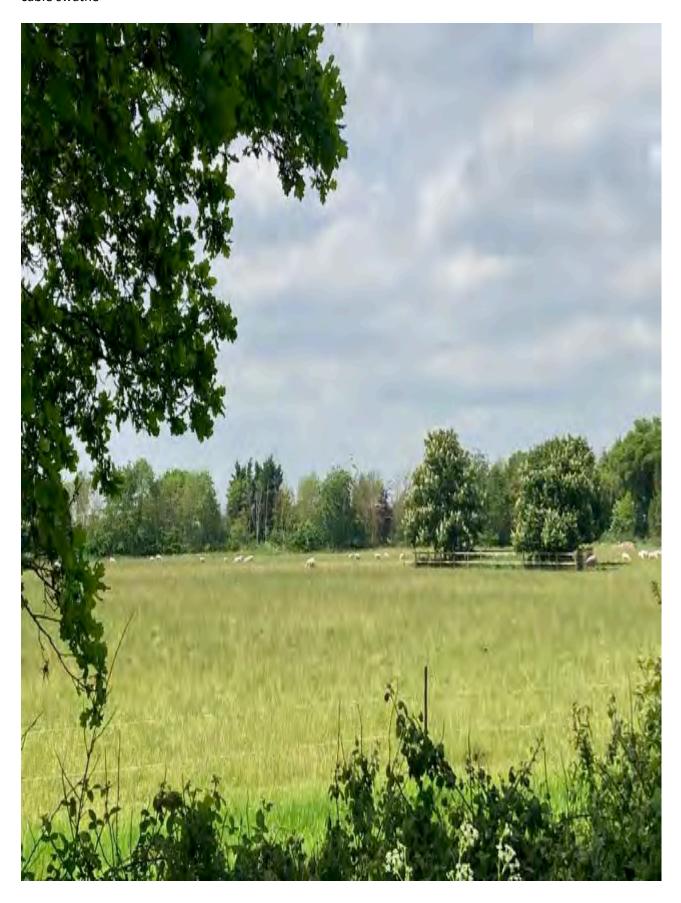


This shows Little Bromley Road looking towards Hungerdown Lane. This will all become part of substation construction, cabling and pylons. There are many old, established trees along this part of the road. All of which will be lost. TB01 – TB04 and cable swathe



Appendix A

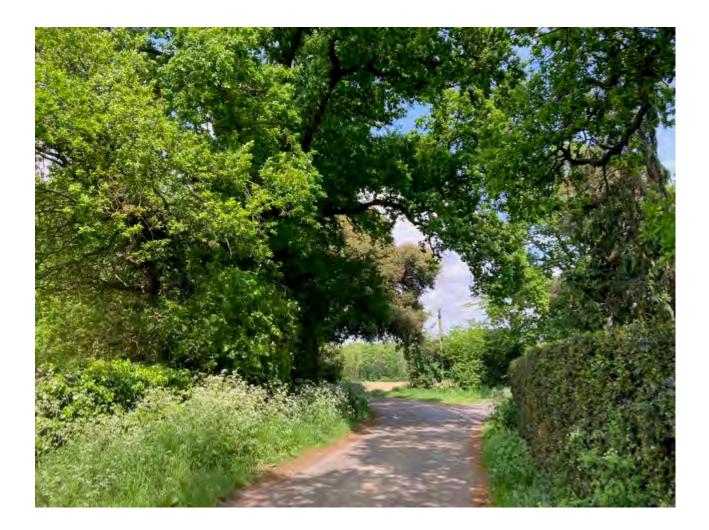
This bucolic view will be lost forever as it becomes part of the pylon, cable swathe. TB04 – TB08 and cable swathe



This is the junction of Little Bromley Road and Hungerdown Lane, This will become subsumed into the swathe and construction site of the substation and its tranquillity will be lost forever. TB03 – TB08 and cable swathe

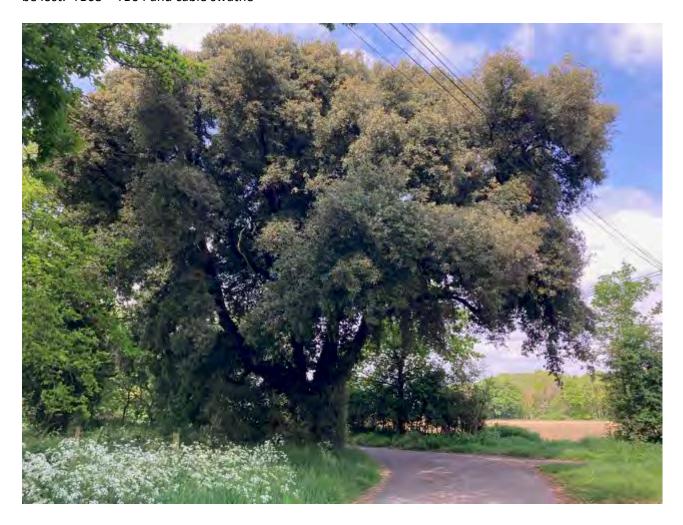


This is Little Bromley Road, leading back towards the village. Again, plenty of ancient woodland, including oak trees. The road is narrow and winding. TB04 – TB08 and cable swathe

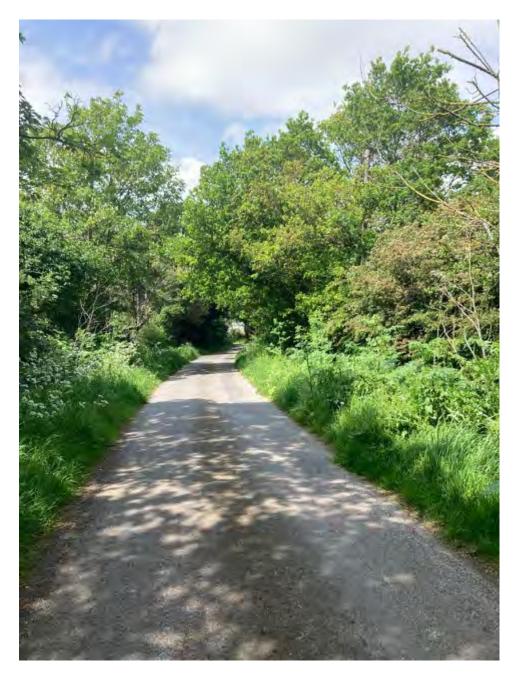


Appendix A

This is an evergreen oak tree on the corner of Little Bromley Road and Hungerdown Lane. This will be lost. TB03 – TB04 and cable swathe



This is Little Bromley Road heading back towards the gate to the farm reservoir, on the righthand side. It is a narrow, quiet country lane that will be devastated and lost forever. Note the diversity in the hedgerows. It was a peaceful walk with only the bird song for company. This cannot be lost. TB04 – TB08 and cable swathe



Carolyn Mason

Ardleigh Resident

14.05.24

