

Application by National Grid Electricity Transmission for an order granting development consent for the Norwich to Tilbury project (EN020027)

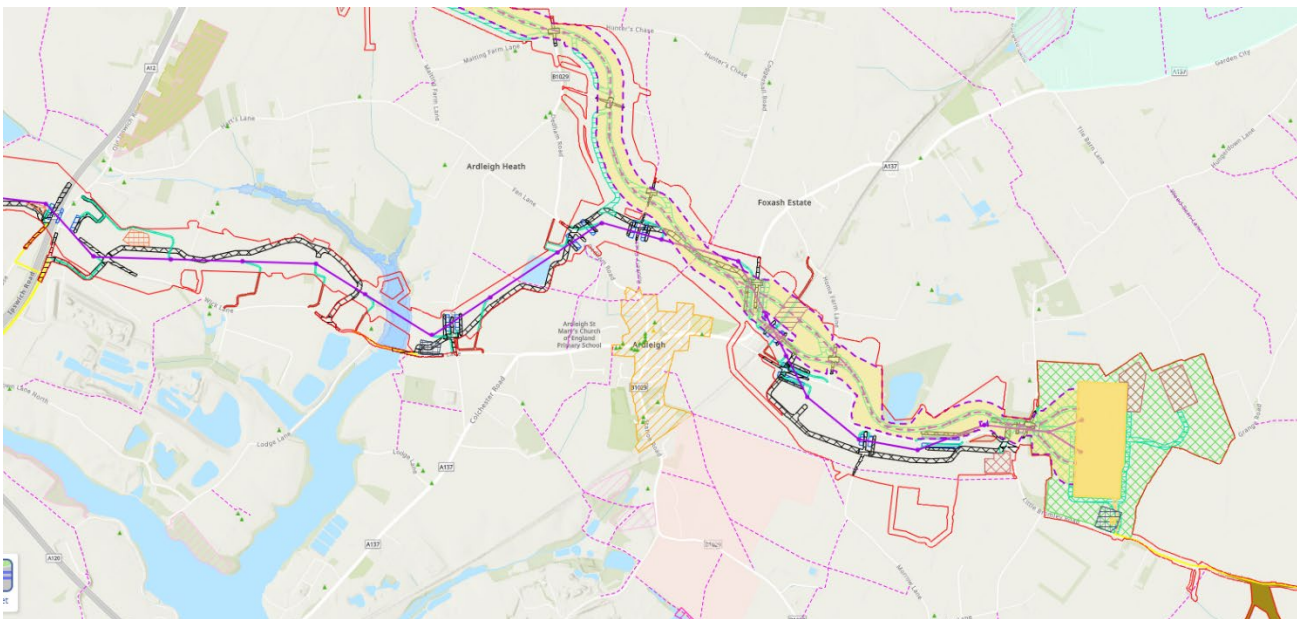
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**REGISTRATION AND REPRESENTATION  
FROM ARDLEIGH PARISH COUNCIL  
27 NOVEMBER 2025**

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This is the Registration and Representation made on behalf of **Ardleigh Parish Council (APC)** in relation to National Grid's Norwich to Tilbury Project (EN020027).

To be clear, APC understands and supports the need to expand the capacity of the grid network to ensure a sufficient and protected energy supply for the UK. However, APC **strongly objects** to the proposals before the Examining Authority, as the proposals fail to identify the best and least harmful approach to grid expansion. In particular, APC has real and evidenced concerns surrounding the adverse impacts of the proposals upon the Parish of Ardleigh and its setting and surroundings, and particularly, to the siting of the **East Anglia Connection Node (EACN)** and associated overhead line and cabling infrastructure.



*Image 1 Map of Ardleigh showing proposed infrastructure*

This representation summarises APC's position as set out in its responses to both the **Statutory Consultation (July 2024)** and the **Targeted Consultation (March 2025)** as its evidence base including the **Ardleigh Neighbourhood Plan (2020–2033)** and the **Tendring District Local Plan**. Copies of APC's responses to the July 2024 and March 2025 responses are appended to this Representation as there were not included in the document library and should be read in their entirety as part of APC's case for objecting. The Examining Authority has already received **APC's Adequacy of Consultation Representation [AoC-024]** and, again, this too forms part of APC's objection.

APC is supported in its objection to these proposals by members of the local community, many of whom have contributed to a fund to assist with procuring expert representation for APC during the

examination sessions. As at the date of submission of this document, £19,150 has been raised from approximately 50 households and businesses.

## 1. Summary of Objection

Ardleigh Parish Council objects to the Norwich–Tilbury proposals on the following principal grounds:

1. **The site-selection process for the EACN is fundamentally flawed**, incomplete and inadequately evidenced, including failure to consider lower-cost offshore integrated options
2. **The statutory and targeted consultations failed compliance with the Gunning Principles** and did not allow meaningful public engagement.
3. **The proposals breach multiple Holford and Horlock Rules**, especially **Holford Rule 3**, due to the pylon arc and multiple angle towers encircling the village
4. **The scheme directly conflicts with the Ardleigh Neighbourhood Plan (2020–2033)** and multiple policies of the **Tendring District Local Plan**, undermining the adopted local spatial strategy.
5. **Ardleigh is the wrong location for the EACN**, given its exceptional constraints, heritage designations, landscape sensitivities and proximity to the Dedham Vale National Landscape.
6. **The cumulative impact** of the EACN, multiple windfarm substations, converter stations, pylons and cable swathes would cause unprecedented and irreversible harm to the parish:
  - Traffic impacts during construction – in terms of road closures, diversions
  - The temporary and/or new roads have not been considered and will despoil the character of the rural lanes
  - impact on the current main traffic routes.
  - There are not viable diversionary roads around the area due to the size and location of back roads, many of which are single width lanes.
  - Noise from pylons has not been addressed.
  - Cumulative noise impact has not been accounted for during the construction phases.



*Image 2 typical narrow road, Little Bromley Road*

7. Viable alternative solutions, including offshore grid connections and brownfield land options, were not properly assessed or presented for consultation.

## 2. Failure of Site Selection – Ardleigh Is an Inappropriate Location

APC maintains that National Grid has not undertaken a credible, complete, or transparent site-selection process. Several technically viable and lower-impact alternatives were not assessed or were dismissed without evidence.

### 2.1 Failure to consider an integrated undersea/offshore grid option—despite National Grid's own evidence that it would *save money*

National Grid has publicly acknowledged, through the Offshore Transmission Network Feasibility Study" (OTNFS), 2011 and in July 2022, under the framework of the ongoing Offshore Transmission Network Review (OTNR), National Grid ESO published the "Pathway to 2030 Holistic Network Design (HND)". and multiple Network Options Assessments, that an integrated offshore transmission network would:

- reduce total system cost by billions of pounds
- minimise reliance on inland substations like the EACN
- reduce the need for new pylon corridors
- limit environmental, heritage and residential impacts
- enable faster, strategic decarbonisation

#### 2011 Report

The primary 2011 report is the "Offshore Transmission Network Feasibility Study" (OTNFS), published jointly by National Grid and The Crown Estate. This study was a foundational analysis for developing a coordinated approach for future offshore wind connections (specifically for the Round 3 wind farms).

- **Key finding:** The report concluded that a coordinated design approach could achieve potential savings for the GB consumer of between £2.4bn and £5.6bn compared to a purely radial solution. A separate report for Ofgem based on this work found potential capital expenditure savings of between 8% and 16%.

#### 2022 Report

In July 2022, under the framework of the ongoing Offshore Transmission Network Review (OTNR), National Grid ESO published the "Pathway to 2030 Holistic Network Design (HND)".

- **Context:** The HND report is the key document from 2022 that presents a *specific* recommended network design for the connection of 23GW of offshore wind by 2030, moving from a piecemeal to a more coordinated approach. While the HND itself is a design plan, the *analysis* that underpins it stems from the earlier "Offshore Coordination Phase 1 Final Report" from December 2020. This earlier report laid out the main cost-benefit analysis for coordination.
- **Key finding (from the supporting analysis):** The 2020 analysis, which informed the HND, projected that an integrated approach for all future projects could save consumers approximately £6 billion (or 18%) in capital and operating expenditure by 2050. It also projected a potential 50% reduction in the amount of new grid infrastructure (cables and landing points) required compared to a purely radial approach.

Despite National Grid's own findings that offshore integration is cheaper, more efficient, and less harmful, the Norwich–Tilbury project:

- does not assess an integrated offshore option
- does not provide a cost comparison
- does not explain why a cheaper offshore option was excluded
- forces an unnecessarily complex, expensive inland solution



This omission is a critical flaw. It results in the EACN being placed in Ardleigh only because lower-cost, lower-harm options were not examined, contrary to National Grid's own published analysis.

## 2.2 Failure to assess brownfield, coastal, or industrial alternatives

National Grid has provided no transparent comparison of:

- coastal brownfield sites
- industrial land near windfarm landfall
- sites closer to the Norwich–Tilbury route
- locations benefitting from existing grid infrastructure

Instead, a heavily constrained rural village has been selected without justification.

## 2.3 Inadequate appraisal of alternative sites near the main Pylon Route

Only two sites were considered for the siting of the EACN Ardleigh and the former RAF Boxted.

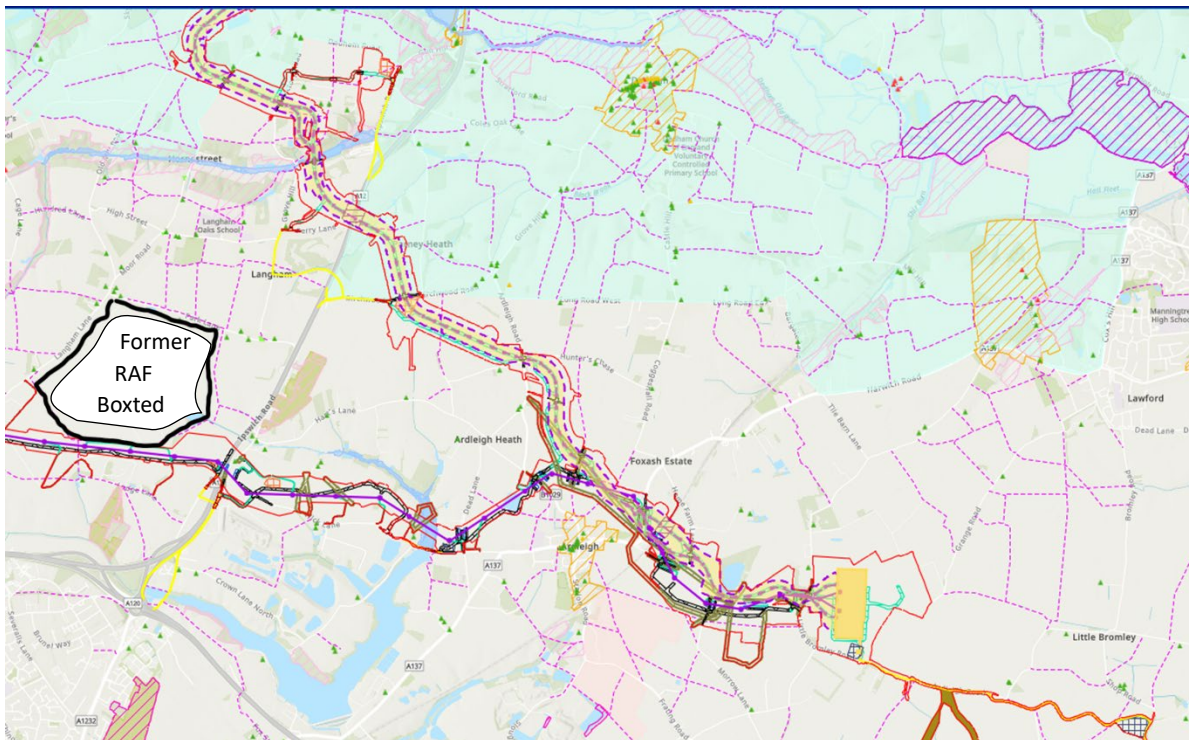


Image 3 location of 'on balance' site-Former RAF Boxted

Although it is not for APC to advocate that the EACN is located at RAF Boxted it does demonstrate the inadequacy of the assessment as RAF Boxted is:

- close to the A12
- adjacent to existing energy and transport corridors
- significantly closer to the core alignment

It was dismissed on vague 'balance of considerations' without technical evidence. How did the 'on balance' view decide on the Ardleigh site? APC understands that Tendring District Council also challenges this dismissal.

## 2.4 Failure to follow the established site-selection hierarchy

Best practice for energy NSIPs requires:

1. Considering offshore and HVDC subsea options
2. Selecting brownfield or industrial sites first

3. Only considering rural greenfield sites as a last resort

In settling on its proposal, National Grid has reversed this hierarchy.

## **2.5 Conclusion on Site-Selection Failure**

Because National Grid:

- ignored offshore options it previously said would save money
- failed to examine brownfield and coastal alternatives
- dismissed local alternatives without justification
- did not follow the siting hierarchy

we can only conclude that the choice of Ardleigh for the EACN is unjustified and unsound.

## **3. Consultation Failures – Breach of Gunning Principles**

APC's assessment concludes that both the statutory and targeted consultations contravened established consultation law:

### **Gunning 1 – Consultation at a formative stage**

Alternative options (including offshore grid, HVDC subsea, alternative landfalls and brownfield sites) were withheld from consultation, meaning the public could not influence fundamental decisions.

### **Gunning 2 – Sufficient information**

Critical environmental, archaeological, heritage and cumulative impact information was missing or incomplete. Maps and documents were very difficult for ordinary people to access and understand. Document indices are often in technical language with links not working as expected. It is necessary to trawl through them separately.

### **Gunning 3 – Adequate time**

The Targeted Consultation allowed insufficient time for residents and stakeholders to understand and respond to complex new proposals affecting hundreds of hectares.

### **Gunning 4 – Conscientious consideration**

Evidence supplied by APC, including on heritage and landscape harm, was not reflected in subsequent design revisions. Notably, pylon TB6 was moved **closer** to a Scheduled Monument after APC raised concerns about potential harm to the site.

## **4. Breaches of the Holford and Horlock Siting Rules**

The Holford and Horlock Rules constitute the nationally recognised method for assessing overhead line and substation siting. National Grid's proposals in Ardleigh breach these rules extensively, especially Holford Rule 3, which is breached in the most severe manner possible.

### **4.1 Holford Rules – Summary of Breaches**

#### **Rule 1 – Avoid major areas of highest amenity value**

**Breach:** Line intrudes into the setting of the Dedham Vale National Landscape, the Ardleigh Conservation Area and a Scheduled Monument.

#### **Rule 2 – Avoid smaller high-amenity areas or deviate to protect them**

**Breach:** Direct impact on Local Wildlife Sites, ancient hedgerows and heritage settings.

#### **Rule 3 – Choose the most direct line with few angle towers**

**Severe fundamental breach.**

The Ardleigh alignment violates Rule 3 in multiple ways:

**Breach 1: Pylons wrapped around the village**

More than 10 pylons (TB001–TB021) form a sweeping arc around Ardleigh, resembling a semi-circle of industrial structures enclosing the village. 10 of these pylons would be angle towers. Of the 21 pylons planned for the village only 8 would be the “standard” suspension pylons.

**Breach 2: Multiple angle towers in succession**

Rule 3 discourages angle towers due to their size and prominence. The Ardleigh design uses multiple angle towers, amplifying skyline intrusion.

**Breach 3: Long sections across flat land**



*Image 4 Aerial view of Ardleigh*

Rule 3 warns explicitly that long runs in flat landscapes cause strong visual intrusion. Ardleigh’s open topography makes the pylon corridor visible from every direction.

**Breach 4: Domination and encirclement of a rural settlement**

Holford guidance requires avoiding routes that dominate or pass close to villages. The proposals encircle Ardleigh, an outcome entirely contrary to the purpose of Rule 3. This includes encirclement of the landmark Grade II\* listed St. Mary's Church, Ardleigh (1112060) and the Ardleigh Conservation Area (CA26). This will also have a permanent impact on PROWs in the village.





*Image 5 Typical view in Ardleigh*

#### **Rule 4 – Use tree or hill backgrounds**

**Breach:** Ardleigh offers no such screening. Pylons stand against open sky.

#### **Rule 5 – Prefer wooded valleys**

**Breach:** Proposals cut across open farmland, increasing visibility.

#### **Rule 6 – Avoid “wirescape” in flat, sparsely treed areas**

**Breach:** Twenty-one pylons, substations, overhead lines and cable swathes create a significant wirescape across Ardleigh.

#### **Rule 7 – Approach urban areas via industrial zones; consider undergrounding**

**Breach:** The approach is through rural land, and undergrounding/offshore alternatives were not meaningfully assessed.

### **4.2 Horlock Rules – Summary of Breaches**

The Horlock Rules require:

- avoiding high-amenity landscapes
- taking advantage of natural landform and vegetation
- minimising visual impact on settlements
- avoiding cumulative industrialisation
- ensuring overhead line connections can be sensitively integrated

#### **Breaches in Ardleigh:**

- The EACN is placed in flat, open countryside with no screening.
- It lies near a Conservation Area, Scheduled Monument, Listed Buildings, and Local Wildlife Sites.
- The cumulative impact of the EACN, Five Estuaries, North Falls, Tarchon converter station and 21 pylons is extreme and cannot be reconciled with Horlock principles.



*Image 6 Proposed EACN site*

Horlock compliance is impossible at this site.

#### **4.3 Conclusion on Non-Compliance with Holford and Horlock**

These proposals:

- severely breach Holford Rule 3,
- breach Rules 1, 2, 4, 5, 6 and 7,
- and violate nearly all Horlock siting principles.

The Examining Authority should give significant weight to these breaches, which show that Ardleigh is unequivocally the **wrong location**.

### **5. Conflicts With the Ardleigh Neighbourhood Plan and Tendring Local Plan**

#### **5.1 Conflict with the Ardleigh Neighbourhood Plan (2020–2033)**

The Ardleigh Neighbourhood Plan (2023) forms part of the statutory development plan and carries full weight in decision-making. The following policies are particularly relevant:

- **GDP (General Approach to Development)**, which expects development outside defined settlement boundaries to be appropriate in scale and impact to its location and context.
- **EP (Natural, Built & Historic Environment)**, which requires new development to be of high-quality design that reflects the local character, avoids urbanising effects, prevents light and noise pollution in tranquil rural areas, and protects important landscape features.
- **TP (Transport and Parking)**, which resists development that would have an unacceptable impact on highway safety or result in severe residual cumulative impacts on the local road network.



The Neighbourhood Plan—developed through extensive consultation and now forming part of the Development Plan—prioritises:

- preserving rural character and tranquillity
- protecting Local Green Spaces
- safeguarding heritage and settlement pattern
- conserving hedgerows, woodland and biodiversity
- avoiding intrusive development

The Norwich–Tilbury scheme directly undermines these objectives and would permanently negate years of community-led planning.

## **5.2 Conflict with the Tendring District Local Plan**

The Local Plan identifies Ardleigh as a Small Rural Settlement where only modest, sustainable development is appropriate. Major industrial-scale energy infrastructure is incompatible with:

- policies on landscape protection
- heritage conservation
- agricultural land safeguarding
- rural settlement character

## **6. Environmental, Heritage and Landscape Harm**

APC's submitted evidence demonstrates that the scheme would cause:

- irreversible destruction of ancient hedgerows, woodlands
- harm to multiple Local Wildlife Sites and irreplaceable habitats
- major impacts on migratory birds and bat populations
- serious degradation of views within and toward the Dedham Vale National Landscape
- harm to a Scheduled Monument and numerous non-designated archaeological assets of high potential significance

The proposals could also jeopardise Ardleigh Reservoir (a major drinking water source), the settings of Listed Buildings, the Conservation Area, and the historic settlement form.

N2T construction could affect water supply, irrigation & Ardleigh Reservoir in the following ways

- Heavy machinery, trenching and soil compaction could damage drainage systems and reduce natural water flow to fields and boreholes.
- Disturbed ground and divided fields could disrupt irrigation infrastructure, making systems harder to operate and less reliable.
- Damage to boreholes or the water table could reduce available irrigation water during key growing periods.
- Removal of hedgerows and large-scale soil disturbance would increase run-off and erosion, sending silt and debris toward watercourses feeding the reservoir.
- Increased sediment, dust and possible construction pollutants could lower Ardleigh Reservoir's water quality and raise treatment needs.

Overall, N2T construction could weaken Ardleigh's irrigation capacity, reduce reliable water supply to farms, and increase sediment and pollutant run-off into Ardleigh Reservoir. This combination threatens both agricultural productivity and the quality of a key local water source.

## 7. Severe and Unacceptable Cumulative Impacts

National Grid assumes that the following will be co-located around the EACN:

- EACN substation (c. 42ha)
- Five Estuaries substation (c. 20ha)
- North Falls substation (c. 20ha)
- Tarchon converter station (dimensions currently not known)
- 19 × 50m pylons, 2 × 60m pylons with Haul roads
- 4.5 Km of Underground cabling swathes and access roads up to 220m wide

The affected area exceeds 275 hectares, representing more than 15% of Ardleigh's unprotected land and fundamentally altering the parish's identity.

This cumulative industrialisation of a rural landscape is unprecedented and unacceptable.

## 8. Harm to Agriculture and Rural Economy

Ardleigh is a largely agricultural parish characterised by **Best and Most Versatile (BMV) Grade 1 land**, enabling high-value food production that supports both local businesses and the wider UK supply chain. The National Grid's proposed Norwich–Tilbury (N2T) route poses significant risks to this landscape, its farmers, and its established rural economy.

- Ardleigh's BMV Grade 1 land is among the most productive in the UK, yielding essential crops and supporting long-standing family farms.
- Typical local production includes soft fruits (raspberries, strawberries, blueberries and asparagus), cereal crops, hay, and livestock grazing on mixed farming units.
- The N2T proposals—50m pylons, haul roads, trenching, and substations—would remove or degrade large areas of high-quality farmland.
- Dust contamination threatens sensitive crops such as soft fruit, which cannot be washed before sale.
- Soil compaction, erosion, and long-term damage to drainage systems would reduce crop yields, with evidence of 20% sustained loss where undergrounding has occurred historically.
- Divided fields and construction routes would hinder the use of modern machinery, reduce efficiency, and make some land uneconomic to farm.
- Removal of hedgerows and windbreaks would increase erosion and reduce productivity, especially on Ardleigh's open, flat landscape.
- Conservation and environmental stewardship work—including newly planted hedgerows and species recovery efforts like Operation Turtle Dove—would be destroyed.
- Key local enterprises such as Peake Fruit, Prettyfields Vineyard, and Benson Stud Farm face serious operational and economic risks.
- Livestock farms could be forced to relocate animals due to fencing removal, noise, dust, and disrupted grazing.
- Increased security risks would arise from hedge removal, more unauthorised access, and greater exposure to theft.

The N2T project would cause substantial and lasting harm to Ardleigh's BMV Grade 1 farmland, its crops, livestock systems, biodiversity, and rural businesses. At a time when UK food production is

increasingly fragile, the loss of such high-value agricultural land would weaken both local livelihoods and national food security.

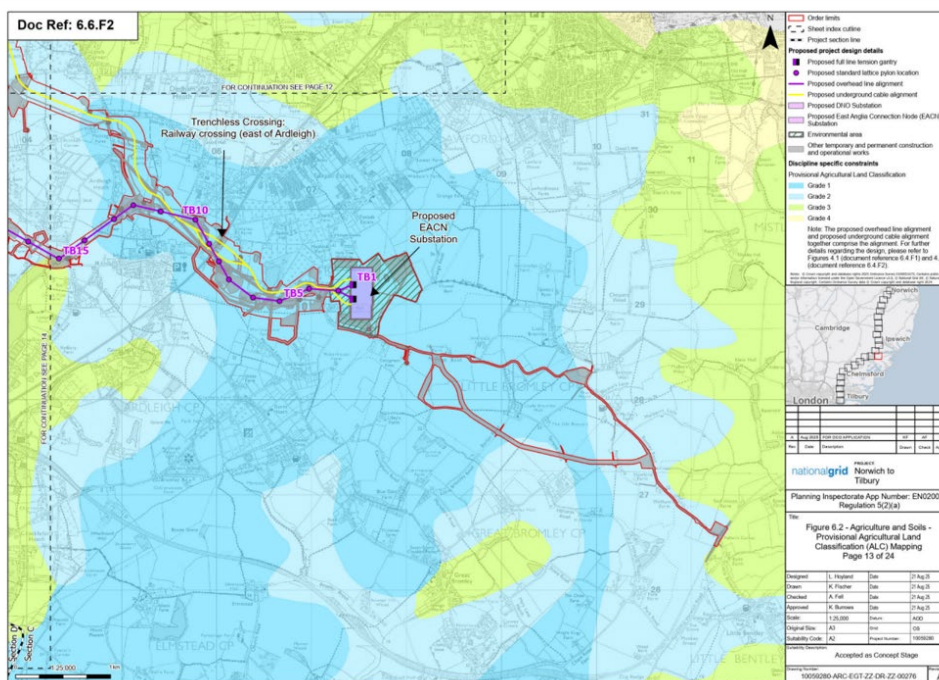


Image 7 map BMV land

## 9. Viable Alternatives Were Not Properly Assessed

APC continues to call for full assessment of:

- a strategic integrated offshore grid
- offshore pooling of windfarm power
- subsea HVDC transmission
- brownfield coastal substations
- relocation of the EACN outside Ardleigh
- HVDC onshore alternatives where necessary

These alternatives offer substantially reduced environmental, social and landscape impact and are more consistent with emerging national policy and the public interest.

## 10. Requests of the Examining Authority

APC considers that in respect of Ardleigh, the Examining Authority should set time aside for:

- A specific session of the examination dealing with the impacts on Ardleigh, given the cumulative, detrimental effects of what is proposed (and the siting of the EACN in Ardleigh).
- Undertake a specific site visit at Ardleigh to view the routes of the proposed pylons and underground cabling in real life (rather than just on a plan) and to experience the village and surrounding landscape as it currently exists. APC may be able to facilitate a view from the tower of the Grade II\* St Mary the Virgin Church, located at the medieval heart of the village, which provides clear views of the surrounding landscape and the impact that the proposal will have upon it.



- c) APC has prepared a short video in support of its objection. It would be grateful for directions as to how best to provide that video for your information.
- d) Can the Examiners please ask National Grid to explain how we can access information on what some of the codes on maps mean?

APC considers that the Examining Authority should give full weight to:

- the flawed site-selection process
- non-compliant consultations
- breaches of established siting rules
- conflict with statutory planning policy
- demonstrable environmental and heritage harm
- unacceptable cumulative impacts
- availability of viable, lower-harm alternatives



*Image 8 lane close to EACN site*

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## 11. Conclusions

For the reasons set out above and in APC's detailed submissions, **APC strongly objects** to the Norwich–Tilbury proposals affecting Ardleigh and urges the Examining Authority to either:

1. Recommend a refusal of the DCO, given the clear detrimental impacts posed by the proposed siting of the EACN and associated infrastructure in Ardleigh; or
2. Recommend modifications to the DCO, removing the infrastructure that adversely impacts Ardleigh. Such a course of action will presumably require National Grid to advance alternative routes, sites and/or methods for expanding the grid.

Ardleigh Parish Council  
November 2025