

BROOMFIELD PARISH COUNCIL, CHELMSFORD, ESSEX

CONSULTATION RESPONSE TO

EAST ANGLIA GREEN ENERGY ENABLEMENT CONSULTATION – JUNE 2022

Abbreviations

NG – National Grid	EAG – East Anglia Green project
OHL – overhead lines	EAC – East Anglia Connection substation
PBD – Project Background Document	
CPRSS – Corridor and Preliminary Routeing and Siting Study	
BEIS - Department for Business, Energy & Industrial Strategy	

About Us

Broomfield Parish Council ('the Council' or 'the Parish Council') is a **statutory organization** representing approximately 4,500 **local residents** spread across 2,500 households north of Chelmsford, Essex. The Council is a statutory consultee for planning applications in the Chelmsford City district and takes a keen interest in all planning matters. We welcome the opportunity to comment on NG's proposals.

Our contact details are:

Mark Hembury (Clerk to the Council)
Parish Council Office
Broomfield Village Hall
158 Main Road
Broomfield
Essex
CM1 7AH

Please note that the Council is part of a group of nine parishes west of Chelmsford which has submitted a statement of common ground regarding EAG. This will be submitted separately, but for completeness is also attached to this response.

General and Policy Context

1.As part of the goal for delivering net zero carbon emissions in the UK by 2050, and the need to connect 40 GW of offshore wind energy by 2030 as part of this goal, do you agree with the identified need for East Anglia GREEN in upgrading the region's energy infrastructure (as described from page 20 in the Project Background Document)?

Neither agree nor disagree. The question is long, complicated and confusing – and rather leading. It seems to be asking 3 questions at once:

Do we agree with delivering net zero by 2050 – yes we do

Do we agree with the need to connect North Sea windfarms to the network – yes we do

Are we convinced of the need to construct 180 km of OHL from Norwich to Tilbury – no, the PBD and CPRSS are not convincing that that this is the right approach.

2. How concerned are you about the following:

The effect of climate change/global warming on your life

The effect of climate change/global warming on the lives of future generations

The UK meeting its target of net zero carbon emissions by 2050 is important to you

With more renewable energy connecting in East Anglia, it is important to reinforce the network between Norwich and Tilbury to enable this energy to be transported to where it is needed

Having domestic energy sources and the associated infrastructure would help increase the UK's energy security

Increasing our domestic renewable energy production and associated infrastructure would make us less reliant on imported oil and gas.

The Parish Council is very concerned about climate change. This is why it forms a major part of our emerging Neighbourhood Plan, encompassing a wide range of measures to encourage sustainable transport, biodiversity and green energy generation. It is also why the Council has appointed a Climate Change Champion to lead on these issues.

However, it is very disappointing that the above statements have been set out in such a leading way, with the specific proposal about EAG slipped in between a number of statements that few on this side of the Atlantic would disagree with. It appears to lead everyone's justified concern about climate change and energy security into supporting a particular set of NG proposals. This is unfair, poor consultation practice and risks undermining the overall outcome of the consultation.

National Grid's preferred corridor and graduated swathe

4. The preferred corridor

We considered and assessed a number of options to select a preferred corridor. Do you agree with the process we have taken?

The Parish Council strongly disagrees with the process NG has taken.

Please tell us the reason for your answer and if you think there is anything we should take into consideration when developing our plans.

Reasons and what NG should take into consideration when developing its plans:

NB Most of our comments relate to the process in general. Particular examples tend to be given from our own area, the City District of Chelmsford and adjoining parts of Braintree and Brentwood.

a) Potential sea route(s) should have been included in the consultation

The CPRSS Report notes that offshore connections are a feasible means of transferring electricity to where it is most needed. Para 1.3.3 states:

'Conceptually connections can be made from either Necton/Norwich area or Sizewell area down to locations such as Grain or Tilbury to connect into London or into Kent'

The preferred solution (Option East 7) includes an element of offshore connection (the SEALink Project, Sizewell to Richborough) but only as a *'separate scheme'* which will be pursued apparently without reference to the EAG or vice versa. Para 1.3.3 and similar positive references make it hard to understand the PBD's assertion that increased offshore capacity would make no difference at all to the need for onshore reinforcement.

There is intense interest in offshore connections and the idea of an 'offshore Grid', seen for instance in the work of the OffSET group of MPs. The Parish Council therefore believes that:

- Full consideration should be given to the potential of transferring more electricity by sea to the south-east via Grain/Tilbury
- This option should have been included in the current consultation, notwithstanding reservations that NG may have about cost etc, so that the public can form a balanced, informed view
- SEALink must be progressed alongside EAG, not as a separate project, so that the potential for transferring more green energy by sea can be maximised. Given NG's acceptance of the feasibility and cost of SEALink, it is hard to see why an offshore connection from Norwich/Nacton or Sizewell to Grain/Tilbury cannot be delivered in tandem with SEALink.

b) Potential Impact of the East Anglian Connection station (EAC) node substation

Para.s 1.3.37 – 39 summarise the implications of adding in the 'additional customers' of the new windfarms off the coast of Essex. This has led to commendable measures to rationalise and therefore reduce infrastructure costs and has had a bearing on the substations from which EAG should start.

Para 1.3.38 implies, however, that accommodating these additional customers via an EAC was an add-on to the basic concept of transferring electricity by OHL. By contrast, the Parish Council sees the impact of accommodating this new green energy from offshore windfarms as an opportunity to re-examine the whole concept of EAG, rather than just amending it. Was consideration given to linking the new windfarms to Kent and/or Grain/Tilbury by offshore cable, via an EAC located close to the coast near Clacton (or even direct, if technically possible)? This would avoid the need for significant OHL impact on the Tendring Peninsula. The Parish Council believes this reinforces the logic for an East Anglia to Grain/Tilbury offshore connection, as outlined above. Again, the Council believes this should have formed an option within the consultation.

c) A General Lack of Options

In addition to the lack of offshore routes, there is a general lack of sufficient options to make consultation fair and meaningful. The Parish Council appreciates that some refinement of options is necessary for simplicity; and that expert views on what is technically feasible must guide that process. Nonetheless, for consultation to be meaningful, there should be at least 2 or 3 real options for each stage of the route. At that point, 'the experts' need to take a step back and see which of the options the public prefers.

The PBD and CPRSS recognize that consultation is vital to get the final plan right:

Listening to communities gives us valuable feedback and insight as we develop our proposals (PBD, p.66)

The analysis (for the 'graduated swathe') was informed by the same desk-based studies and limited field observations that informed the options appraisal and its findings should therefore be considered

provisional, indicative and subject to revision as more detailed information becomes available (CPRSS para. 7.6.1)

It's therefore surprising and very regrettable that a Preferred Route has already been identified before any community consultation has taken place. Instead 'expert panels' have taken options beyond the point where the community can make an effective input in terms of choosing a different option. The frequent use of the passive tense when referring to decision making (e.g. 'it was preferred ...') leads to a lack of transparency. We need to know which experts said what and why. The process also fails to recognize that even expert views can be subjective in some respects, particularly in terms of landscape appreciation.

This is poor practice in consultation. The danger is that communities in general (except for specific interest groups) won't engage as 'the experts have already decided'; and that the process will be deprived of this balanced community input and therefore not lead to the best outcomes. The consultation must be re-run, offering a wider range of options, guided but not prejudged by expert opinions.

d) The 'Graduated Swathe'

The lack of options is particularly seen in the concept of the 'graduated swathe'. There is ambiguity about whether public consultation is only about refining options within the 'swathe' (as the wording of Question 5 suggests). Or whether the whole 'swathe' is provisional and could be completely changed through a rather complicated process of back-checking.

Reading all the documents, it seems unlikely that NG will consider any route outside the preordained 'swathe' except in the most exceptional circumstances. It seems that the 'swathe' is the experts' choice. Locals are then allowed to suggest features and minor alterations which the experts may '*take into consideration*' (or not). This is rather condescending and again represents poor practice in consultation.

In fact, as expert opinion has largely been desk-based to date with few site visits, it is highly likely that local consultation may identify unforeseen obstacles that make an entire 'swathe' inappropriate. Equally, it could suggest mitigation that might make a non-preferred corridor better than the preferred 'swathe'. Each 'swathe' should therefore be open to complete re-examination following the consultation.

The Parish Council therefore finds the use the 'graduated swathe' unhelpful and potentially misleading; and would prefer a more open approach to selecting specific routes.

e) Lack of Clarity re: 'Inland is Best'

The Council is also concerned about the lack of clarity regarding the boundaries of the coastal area from which pylons should be excluded due to protected habitats and species.

Section 7 explains at length why the various more direct routes from the EAC to Tilbury have to be excluded due to NG's statutory duties to avoid harm to protected species. In view of this, it is hard to see how '*the filtering workshop did not identify any corridor sections as non-feasible*' (para. 7.5.2). Four of the six identified options (ET1 – ET6) include coastal sections, leaving only two (ET1 and ET5) for meaningful consideration.

There is some ambiguity about whether ET5 is 'coastal or 'inland'. Unfortunately, the 'coastal exclusion zone' is effectively not defined, due to the time and effort it would take. Instead, an informal process is

suggested, whereby NG's assumptions about what Natural England would have said are to be 'back-checked' retrospectively.

This lack of clarity is clearly unsatisfactory, especially in relation to Option ET5. If Option ET1 is in fact the only 'inland route', other routes to the west should have been added to ensure meaningful consultation, while those within the coastal exclusion zone could have been disregarded. If, however, ET5 is also 'inland' it should not be regarded less favourably than ET1 in that regard. The rather fuzzy concept in the CPRSS that 'inland is best' is no substitute for clear, robust and transparent definitions. The Parish Council believes this is unacceptable and fears it could leave the process open to challenge at a later stage.

f) Government and Local/Neighbourhood Plan policies

Relevant national policy is set out in the Electricity Act 1989; in Policy Statements EN1 and EN5; and in the Holford/Horlock Rules. These are summarized in Section 3 of the CPRSS.

Amongst other points, the Council notes that:

- The Electricity Act 1989 requires infrastructure providers to:

.... have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and ... do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside...
(CPRSS para 31.1)

- EN5 recognises that:

Where there are serious concerns about the potential adverse landscape and visual effects of a proposed overhead line, the IPC will have to balance these against other relevant factors, including the need for the proposed infrastructure, the availability and cost of alternative sites and routes and methods of installation (including undergrounding) (CPRSS para. 3.1.9)

Implications arising from the Holford Rules are outlined in para g) below.

Taken as a whole, the Government's approach towards landscape conservation appears much more nuanced and generous than NG's more minimalistic stance which is more concerned with '*balancing the need to be economic and efficient*' (EAG email, 10.6.22). NG's contention, even at the Preferred Options stage, is that standard 50m steel lattice pylons are fine unless proved otherwise.

At this stage, NG's only exception is for National Parks and Areas of Outstanding Natural Beauty. In fact, although EN1 does equate these with the highest amenity value land, that does not preclude other areas of high landscape value from receiving similar protection. The Parish Council believes that NG should take a more generous view, in keeping with the general tenor of Government guidance.

The Council also considers it unfortunate that such a major infrastructure proposal should take place whilst the BEIS Review of offshore energy co-ordination is still in progress. As noted in PBD, p.26:

Government will be looking to redesign the current regime to bring more extensive coordination and mitigate environmental, social and economic costs for the 2030s and beyond.

This will quite possibly have a major impact on NG's current proposals and its role/relationship with offshore energy providers. Ideally, the impact of the BEIS White Paper would be clear before NG published these proposals.

Also, there is no evidence that the PBD or CPRSS have taken account of local plan policies. In Chelmsford, the Local Plan strategic policies S3, S4, S11 and development management policies DM13, DM14, DM16, DM17 and DM19 are all relevant. They deal with the conservation and enhancement of the natural and historic and the countryside – for instance, Policy S11c:

*..... The intrinsic character and beauty of the Rural Area outside of the Green Belt, and not designated as the Green Wedge, will be recognised, assessed and development will be permitted where it would **not** adversely impact on its identified character and beauty (emphasis added)*

Likewise, no consideration appears to have been given to adopted neighbourhood plans (such as Writtle) or emerging neighbourhood plans (such as Broomfield). The implications are outlined in the Council's response to Question 5 below.

g) The Holford Rules – Topography and Directness

i. Topography

Holford Rules 4 and 5 state:

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.

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.

Note on Rules 4 & 5

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.

The Preferred Route in the Chelmsford City District and adjoining areas of Braintree and Brentwood shows very little compliance with these rules because:

- It follows higher ground and ridges to the north, north-west and south-west of Chelmsford
- It therefore increases the number of towers visible on skylines
- It tends to follow along ridges and high ground, rather than crossing them directly, obliquely or where there is a dip in the ridge.

This is shown on Map A (attached).

Map A indicates that Option ET5 (compromising Sections L and Q) performs well against these two Holford rules. In particular, Section L crosses the lowest-lying land, which may be described as a 'moderately open valley'. The relatively steep incline to the Danbury/Little Baddow ridge to the east

means that large parts of the existing pylons are almost invisible when viewed from the A12 corridor due to the ridge and vegetation behind. Sections of the A12 are bordered by planting, further limiting the visual impact of existing pylons. Para. 7.1.6 of the CPRSS notes that:

some such opportunities (to follow Holford Rule 5) may be afforded by the more complex system of valleys associated with parts of the Rivers Chelmer and Blackwater and their tributaries.

But there is no evidence of this being followed through in terms of route selection.

Section Q also performs better than the preferred Section K. It could perform better still in terms of topography if it followed the southern section of the A12 Chelmsford Bypass more closely, as shown by the dotted line in Map A. It would then lie on the lower land between Galleywood Common and Stock. The Council recommends that this amendment to Section Q is actively considered.

ii. Directness

Holford Rule 3 states:

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

Section K in the Preferred Option ET1 includes two sharp (almost 90 degree) changes of direction south of Writtle. The 'graduated swathe' is very narrow at this point, suggesting there is very little flexibility to reduce the tightness of the angle. This is clearly contrary to Holford Rule 3.

By contrast, Option ET5 (Sections L and Q) appears able to provide more gentle changes of direction. The Council's suggested amendment to Section Q (the dotted line on Map A) would also help to avoid a sharp change of direction where Section Q joins Section R.

Distance: We calculate distances from the junction of the eastern arm of Section L/Section K to the junction of Sections Q, K and R (near Ingatestone) as follows:

Using Sections L and Q: 26km

Using Section K: 28km

This makes L and Q the most direct route in terms of distance.

In summary, the process followed to date to identify the Preferred Route does not appear to conform to the Holford Rules, given the existence of feasible alternatives (CPRSS, para.s 7.5.2/3). The Parish Council therefore requests the process of selection is re-run.

h) Agricultural Land Quality

The National Planning Policy Framework (NPPF) recognizes the importance of protecting the best and most versatile agricultural soils and requires planning decisions to recognize:

... the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, ... (para. 178)

Alongside energy security, food security is also vitally important. Exploiting the best and most versatile soils near areas of high population (like South-East England) also reduces the need for long food chains, thus helping to fight climate change.

The CPRSS seems to take little account of the quality of agricultural land. Para 3.1.7 states:

Topics such as air quality, soils and geology, and water were scoped out on the basis that at this phase of the Project with the topics above already applied [Biodiversity; the Historic Environment, Landscape and Visual Amenity (Landscape and Visual) and Socioeconomics] that these topic areas would not have a significant effect on the determination of the preferred route for the connection or substation siting.

By definition, it is unclear how a decision to 'scope out' soils etc is justified, as it has been omitted from the study. It is also unclear why the other included topics should be regarded as reasonable proxies.

In relation to the EAC/Tilbury section, para 1.3.40 makes only passing reference to soil quality and no mention at all of the extensive amount of Grade 2 agricultural land. In this section of the Study, Grade 2 land lies broadly to the north of the A12 and Chelmsford, with Grade 3 and 4 land to the south (see Map B). Broadly speaking, Section K is almost entirely composed of Grade 2 land, with all the other sections except F and H being Grade 3 or 4.

Where sections lie upon Grade 3 land, there has been no attempt to divide them into Grade 3a (which constitutes Best and Most Versatile land in the national definition) and Grade 3b (which does not). In any event, Grade 2 is clearly higher value land than either type of Grade 3 land, so should receive greater protection.

The Parish Council strongly believes that soil quality is a relevant consideration. Impacts of OHL pylons include, at the least, disruption to agriculture during construction and form permanent obstacles which make the efficient use of large machinery more difficult. In addition, if mitigation is required at the more detailed stage – such as undergrounding, use of T pylons or woodland planting – this may result in further disruption or permanent loss of agricultural land.

Map B indicates how the preferred Option ET1 has the greatest impact on the highest category of land present in this area. Given the possibility of routing the OHL line via ET5 (or indeed any other option), this is a further reason why ET1 should be discounted.

i) Additional Corridor Sections

The Council would like to highlight 3 additional corridor sections that appear to merit consideration (see Map C attached). It is not clear why they have not been considered or have been considered unfeasible.

i. Section M: extension south-westerly to join Section L

This would enable a further option to be considered, linking sections F and G (or H), J, M, L, Q and R. It would route pylons on lower-lying land, whilst avoiding Grade 2 land and the coastal area affected by protected species.

ii. Section L: extension south to join Section S

This would follow a similar route to the existing 440KV line, potentially offering opportunities for 'close paralleling' and would be set back from the Blackwater and Crouch estuaries. Whilst there may be both constraints and opportunities, it is unclear why it has not been considered as an option.

iii. Section Q: extend corridor slightly north

This would allow the potential for the line to run on lower land alongside the A12 and further away from the village of Stock. The A12 corridor is already impacted by road infrastructure. This amendment is shown by the dotted line on Maps A and B.

At the western end, a more gradual re-alignment to join Section R appears achievable. This would set the corridor slightly further east, away from the villages of Margaretting and Ingatestone and from the historic asset of Ingatestone Hall.

5. The graduated swathe

We have shown a graduated swathe within the preferred corridor to indicate where we feel it is most likely that any infrastructure (pylons, overhead lines, underground cables, substation etc.) may be built. Are there any features within the graduated swathe that you think we should take into consideration when developing our plans?

The following features must be given full consideration:

Graduated Swathe in Broomfield Parish and adjoining area (Section K, north section) See Map D.

a) Sheepcotes Wood

This is ancient woodland and a local nature reserve (see Chelmsford City Council, Local Wildlife Sites Review 2016, Appendix 2, Register of Local Wildlife Sites). As ancient woodland, NG criteria state 'seek to avoid'. Interpretation of this criterion is minimalistic in this regard, as the graduated swathe is adjacent to the Wood.

b) Great and Little Waltham Conservation Areas/Registered Park and Gardens of Special Historic Interest/Scheduled Monument

The graduated swathe seeks to exploit an extremely narrow (100m) gap between the two conservation areas. This is unacceptable because:

- Identified Routeing Constraints (CPRSS p.37, Table 3.1) indicate that impacts on conservation areas should be minimized. It is a different requirement to 'seeking to avoid' (which applies to certain other features) – the overall impact needs to be minimized. This requirement cannot necessarily be met in a narrow, minimalist way by simply squeezing through a narrow gap regardless of impact.
- Impact on Little Waltham CA
In this particular case, the impact is significant. There are no topographic features to mitigate impact and, due to the flat open terrain, the installation of 45-50 m high pylons would completely dominate and overshadow the historic character of Little Waltham. There are no tall structures in the CA at the moment, so installation of pylons anywhere in the graduated swathe would lead to a massive change of character.
- Impact on Great Waltham CA and Langleys Registered Park and Gardens of Special Historic Interest
Likewise with Great Waltham CA. While slightly further from the village, the pylons would have a similarly dominating effect on the CA. The critical issue here is that the CA also contains the Langleys Registered Park and Gardens of Special Historic Interest and the significant Listed Building of Langleys. The character of the Park is pastoral and bucolic, with meadowland and scattered trees, and it is crossed by a number of public footpaths. The installation of pylons along the eastern edge of the Park would clearly have a massive impact, by inserting a modern steel feature as a backdrop to the House and Gardens.

- Iron Age Settlement Scheduled Monument

Finally, there is a scheduled monument in this narrow gap, which the pylons must 'seek to avoid' (Table 3.1).

Overall, it is clear that the graduated swathe is too narrow and too constrained at this point to host OHL.

c) Larks Lane (Great Waltham to Broads Green)

Larks Lane is a Protected Lane, with a listed building in the central section at Bell's Farm, and would be completely dominated by OHL. The graduated swathe is still relatively narrow at this point so, unless there were additional angle towers, the OHL seems likely to oversail a significant stretch of the Lane.

d) Sparrowhawk Wood and Border Wood

Sparrowhawk Wood is entirely ancient woodland, as is the southern part of Border Wood where it adjoins the swathe (see Chelmsford City Council, *ibid*). They are both Local Wildlife Sites as well. As ancient woodlands, OHL must 'seek to avoid'.

e) Border Wood Lake (also known as Tufnell Mere)

This large former gravel extraction area is now a Local Wildlife Site (Chelmsford City Council, *ibid*). It is well used by flocks of geese, other large birds and waterfowl, which can often be seen on the Lake and the slopes surrounding it. As a local nature reserve, NG is obliged to 'seek to minimise' any impact. A detailed study would need to be carried out over a 12 month period to determine what species are represented and what their flight patterns and corridors are.

f) Large bird flight patterns and corridors in general

In addition to Border Wood Lake, there are a number of flooded ex-gravel workings and natural ponds/watercourse that are used by waterfowl. In neighbouring Chignal Parish, data has been collected which indicates the significant presence of large birds (see: <https://www.raptorsofchignal.co.uk>). Further study would need to be carried out over a sufficiently long period to identify species and their flight patterns/corridors across the Pleshey Farmland Plateau and assess the impact of OHL.

g) School playing fields at Bedford Fields

This extensive sports site is the detached playing fields for King Edward VI Grammar School. It is intensively used and pitches are laid out to make the best use of the available space. Oversailing with OHL would reduce amenity value and pitch layout could make it difficult to site pylons where required.

h) Strategic Growth Site 8 'North of Broomfield'

The area north of Woodhouse Lane has been allocated for around 450 homes in the Chelmsford Local Plan. A planning application for 512 homes is about to be determined (decision expected on 20th June). Therefore, this will constitute a 'Built-Up Area' by 2030, with NG obliged to 'seek to avoid' so it would need to be removed from the graduated swathe. The presence of around 1,000 new residents will also further increase the relative amenity value of the surrounding countryside, especially the footpath network.

i) Broomfield Hospital and Helipad

Broomfield Hospital is a major general hospital serving the whole of mid-Essex. It is also the site of St. Andrew's Burns Unit, which is a major specialist unit for the region. The helipad is therefore an important feature both for the Essex Air Ambulance and helicopters from outside the area. These are often seen circulating above the area awaiting landing.

Safety for aircraft is clearly an overriding consideration. At the very least, there may be a need to install night-time lighting on pylons and other high-vis markings on pylons and cables. By definition, these would increase the visual impact of pylons on receptors and could rule out some landscape mitigation measures.

Also, the Council asks if there has been a thorough assessment of the potential impact of OHL on specialist hospital equipment, such as (but not limited to) MRI scanning equipment. This is clearly a technical question, but the Council notes that even underground power lines within the Hospital site had to be specially insulated to avoid this effect.

With greater specialization likely as the health economy develops, installation of OHL could constrain the efficient development of hospital services on this site in the future and thereby limit exploitation of the huge capital invested in redevelopment of the site in recent years. Given this uncertainty and the presence of a feasible alternative route for the line in Option ET5, the Hospital and helipad are a constraint that seem best avoided completely.

j) Residential Properties

As well as the forthcoming homes at Strategic Site 8, there existing properties that would need to be avoided. The north-west corner of the Hospital site is extensively developed with residential properties, including apartment blocks for Hospital staff.

In the centre of the swathe, there are a number of properties at Partridge Green which would need to be avoided, as would properties on Larks Lane and the eastern edge of Broads Green; and around Woodhall Farm on Chignal Road.

k) Bushy Wood

This tract of ancient woodland would need to be avoided. It also a Local Wildlife Site (see Chelmsford City Council, *ibid*). Whilst the swathe is wider at this point than to the north, providing reasonable clearance could entail a change of alignment and an additional angle tower.

l) Pleshey Farmland Plateau – General Landscape Issues

The Parish Council began a Neighbourhood Plan (NP) in 2016 and it is approaching formal consultation, with a view to adoption in 2023. Early feedback from residents stressed the overwhelming value that residents place on the countryside, with 99% ranking it as important or very important. In particular, the following factors were explored, with percentages showing the proportion of respondents saying this aspect of the countryside was important or very important to them:

Tranquillity	99%
Opportunity for recreation (e.g. walking, jogging)	96%
Openness	99%
Natural break between Broomfield and other settlements	93%
Wildlife	96%
Views	96%

Other responses identified the extensive use of footpaths, which mainly lie to the west of Broomfield.

Given these views, a full professional Landscape Appraisal was conducted by Alison Farmer Associates, with an additional follow study to identify important views and green spaces. The Appraisal identified the sensitive nature of the Pleshey Farmland Plateau – the elevated area to the west of Broomfield extending into neighbouring parishes, especially Chignal and Great Waltham.

Based on this evidence, the draft NP recognizes the Pleshey Farmland Plateau as a special landscape area whose intrinsic character and requires specific protection. The relevant policy states:

The Pleshey Farmland Plateau Landscape

The intrinsic character and beauty of the rural landscape known as the Pleshey Farmland Plateau, as identified on the Policies Map, will be protected from inappropriate development as defined by Policy DM8 of the Local Plan. Any proposal for development in this area should demonstrate, through the submission of a Landscape Visual Impact Assessment, how it will protect the landscape qualities and key features of identified important views of the area, as identified in the Broomfield Landscape Appraisal.

Other policies deal with related matters such as the protection of important views, several of which would be impacted by the graduated swathe.

To enable NG to assimilate the results of the landscape study associated with the NP, Broomfield and Chignal Parish Councils have commissioned a further report by Alison Farmer Associates, drawing together the relevant aspects of the NP Landscape Appraisal and specifically addressing the issues raised by EAG and the graduated swathe at Corridor K. It then goes on to examine the relative impacts on Corridor Section K compared to Corridor Section L.

Clearly, as an emerging process (albeit nearing completion), NG will be unaware of the Broomfield NP and associated landscape study. We are therefore pleased to attach Alison Farmer’s most recent report to this response, with the request that it is carefully studied and that due consideration is given to the issues raised.

m) Pleshey Farmland Plateau -Topography

The Council would particularly like to emphasise the elevated nature of the Pleshey Farmland Plateau. This is clearly visible in Map E (attached). This illustrates how the graduated swathe is conterminous with the highest land in Broomfield and neighbouring parishes.

In addition, the swathe follows along the ridge, meaning that the line of pylons would be visible at right angles from the settlement area of Broomfield to the east; from Chignal Road (to the west) and Margaret Woods Road (to the north) and associated properties. Public rights of way and lanes, such as Woodhouse Lane and New Barn Lane (a PRow), tend to cross the Plateau east-west. Again, this means maximum visibility for the pylons which would be entirely set against the skyline due to the topography.

This is directly contrary to Holford Rules 4 and 5.

n) Archaeology

For simplicity, only the Iron Age village Scheduled Monument and the Late Iron Age (LIA)/Romano-British site are shown on the main map. We also attach a much more detailed set of maps (Map F) showing a greater range of features and finds, taken from the Historic Environment Register and local knowledge developed through metal detecting, field walking etc.

The Council appreciates that many archaeological features can be left undisturbed by OHL so are not necessarily of direct relevance at this stage. However, we attach this information now as it could have a bearing at future stages if the Preferred Option is pursued (e.g. to the siting of pylons, or undergrounding). The main point at this stage is that the 'swathe' is very crowded archaeologically and a lot of further investigation could be required, increasing cost and complexity.

Graduated Swathe south-west of Broomfield Parish (Section K, south section and Section R)

The Council has not studied features in this part of Section K so closely. However, it is aware of and concerned about the following features:

- **Chignal St James**

The graduated swathe is extremely close to this historic village, with a number of residential properties.

- **Brittons Hall Farm Landfill Site**

South of Chignal St James – this appears to be included in the graduated swathe.

- **Writtle Village area**

There are 2 sharp changes of alignment (approx. 90 degrees) in this constrained part of the graduated swathe which are contrary to Holford Rule 3. This is surprising, since Option ET1 was preferred over Option ET5 partly due to fewer sharp changes of alignment.

- **Hylands House and Park**

Hylands Estate is a grade II* listed country park encompassing 574 acres of historic parkland, owned by the City Council who restored Hylands House to its former glory. It is also an extremely well-used Country Park. The Chelmsford City Council Register (ibid) states:

This is one of the largest areas of parkland within the local authority area and retains species-rich grassland, ancient woodland and numerous large and veteran trees, all of high nature conservation value. Its role as a site in allowing the public to experience the diverse wildlife and varied habitats, with inherent health and education benefits should not be under-estimated.

The graduated swathe runs along the southern half of the western boundary, so a line of pylons would be highly visible due both to alignment and height. Further, the angle tower needed to change alignment would be extremely close to the Park boundary (200m?), exactly where the Park includes a

tract of ancient woodland, South Wood. As with Langleys in Great Waltham, the pylons would introduce a dominant modernist structure to this listed country park.

Hylands Park and the adjoining western area part-covered by the swathe are also designated as a Special Landscape Area in the adopted Writtle Neighbourhood Plan.

- **Ingatestone Hall**

Ingatestone Hall is a very significant Grade 1 listed building. NG's criteria require OHL to 'seek to avoid' but the graduated swathe appears to run between 0 and 500m from it. Again, the dominating presence of 45-50m pylons would present an incongruous backdrop when approaching from the west.

- **Dunton Hills Garden Village (proposed in emerging Brentwood Local Plan)**

CPRSS, para 7.2.5 notes that:

The area to the west of Basildon and the relatively large gap between the settlements of Brentwood and Billericay are notably less constrained than those to the east and so the potential for option corridors were investigated to both the east and west of Basildon.

Para. 7.5.30 notes that an area to the west of Basildon is proposed as a garden village in the emerging Brentwood Local Plan, though tries to dismiss the need to take account of this on the grounds that the development is knowingly planned beneath two existing OHLs. This rather peculiar logic clearly does not negate NG's requirement to 'seek to avoid' a Built-Up Area, if the Garden Village is constructed in due course; Holford Rules Supplementary Note on Residential Areas also applies.

The Parish Council asks whether the relative gap between the settlements of Brentwood, Billericay and Basildon (including the proposed Garden Village) has been recalculated to allow for this development? And, if so, whether this has been factored in to a revised assessment of Corridor Section R compared to other Corridor Options (such as S)?

6. Dedham Vale Area of Outstanding Natural Beauty (AONB)

This section of the reinforcement needs to connect from Bramford substation to the new connection substation on the Tendring Peninsula. We are proposing to route through the AONB using underground cables. Please comment on any aspects of the routeing and mitigation that you would like to see in relation to our proposals through the AONB.

The Council welcomes NG's willingness to consider undergrounding for high amenity land in the AONB and would also welcome similar flexibility regarding smaller high amenity land in other sections, including in locally-recognised areas of high landscape value.

The Council also welcomes the recognition in para. 5.5.5 that adverse impacts on high amenity assets can occur due to the presence of OHL, even when the OHL does not actually lie within the asset (in this case it refers to Option BE4 and the AONB). We make a similar point about the impact on the conservation areas at Great and Little Waltham (see 5b) above.

7. The preferred substation site on the Tendring Peninsula

We considered and assessed a number of options to select a substation site. Do you agree with the process we have taken?

No. As indicated in 4b) above, the Council believes that an option to facilitate an offshore cable link to Grain/Tilbury should have been included.

8. Please comment on any aspects of the site and/or areas of mitigation that you would like to see in relation to our proposals for a new connection substation.

An option for a substation to facilitate an offshore connection to Grain/Tilbury (rather than by linking to onshore OHL) would suggest a location closer to the coast. In turn, this would reduce the need for OHL on the Tendring Peninsula.

9. Associated work at existing substations

We will need to connect the reinforcement into existing substations at Norwich Main, Bramford and Tilbury and to carry out some work at these locations

The Council has no comment.

Other considerations

10. Refining our proposals

We will carry out further assessments and considerations to help us decide where we could locate new infrastructure within the preferred corridor and preferred substation site.

Are there any particular features, considerations or mitigation that you think we should consider as we refine our proposals?

Particular features within the preferred corridor/graduated swathe are set out in the Council's response to Q.5 above. In terms of mitigation, however, we question whether the impact on all the identified features can be mitigated, except by choosing a different route. This is why the Council considers that other route options must be considered, both off and onshore.

The most obvious onshore alternative is Route Option ET5. This is examined further in our response to Q.11 below.

As stated, the Council strongly believes that 'refinement' and mitigation must extend to reassessing the preferred route, either through extensive back-checking or preferably through a more open and thorough re-assessment. Refinement cannot be limited to tinkering and tweaking within predetermined corridors and swathes. It is unacceptable to say that preferred options chosen without public consultation cannot be re-considered in the light of that consultation.

11. Are there any other considerations we should take into account when developing our proposals?

The Parish Council believes the whole consultation should be re-run, due to the lack of meaningful options presented (see our response to Q.4). The issues outlined below could then be properly addressed, but in any event, they are important considerations that NG should take into account when developing its proposals:

a) Potential changes arising from the White Paper including changes to the regulatory regime

Please refer to our answer to Q4 f).

b) Progress of SEALink (Sizewell to Richborough) and potential for this to include a link to Grain/Tilbury

Please see our response to Q4.b) above. In particular, this should be progressed in tandem with the Norwich/Tilbury question, not as a separate scheme.

c) Re-assessment of Routeing Options around Chelmsford

Whether through a process of ‘back checking’ or a fundamental re-appraisal of options, there needs to be a re-assessment of route Options ET1 and ET5.

The difference between these routes is essentially that ET1 follows Corridor Section K entirely, while ET5 begins in the north with Section K, then follows Corridor Sections L and Q before joining Section R (at the same point as Section K).

As outlined above, the Council suggest a refinement to Section Q between its junctions with L and R. Working from the east, it could follow alongside the A12 Chelmsford bypass then, to the west, follow a more gradual approach towards Route R, set back from Margaretting, Ingatestone and Ingatestone Hall. This suggestion is shown by the dotted line in Maps A and B.

In comparing the relative impacts of ET1 and ET5, the following table may be helpful:

(NB comments in the table only refer to the sections where ET1 and ET5 are different. Also, for simplicity the table does not make reference to detailed features, such as listed buildings or ancient woodlands):

Issue	NG’s duty, aim or objective	ET1	ET5
Cost	NG, Approach to Consenting	£353M <i>(CPRSS, para 7.5.40)</i>	£352M <i>(CPRSS, para 7.5.40)</i>
Distance (between relevant junctions)	Holford Rule 3 – Directness and NG, Approach to Consenting	26km <i>(BPC calculation)</i>	28km <i>(BPC calculation)</i>
Impact on elevated land, ridges and skyline	Holford Rule 4	Follows or cuts across elevated farmland plateaus to the north and west of Chelmsford	Follows low-lying land east of Chelmsford, then moderately elevated to south
Use of valley landscape to reduce visibility	Holford Rule 5	Crosses directly across valleys where these are encountered between ridges; does not follow valleys until junction with Section R.	Follows Chelmer Valley east of Chelmsford – pylons’ visibility reduced against wooded background of Danbury/Little Baddow ridge
Potential for ‘close paralleling’	See CPRSS, para 3.2.10 – 1st bullet	None	High, due to existing 440KV and 132KV lines in Section L.

Potential for mitigation through rationalization of existing 132KV line	See CPRSS, para 3.2.10 – 2nd bullet	None	High, due to existing 132KV line in Section L. Net gain might be achieved in some sections (e.g. around Sandon village) if carefully planned with existing 440KV line.
Potential for 'wirescape'	Holford Rule 6	Very limited, as few if any existing pylons	Potential for 'wirescape' without rationalization of existing lines
Impact on Conservation Areas	'Seek to minimise' – see CPRSS, Table 3.1	Significant impact on CAs at Great and Little Waltham	Significant impact on Chelmer & Blackwater Navigation CA (though undergrounding 132KV line could offer mitigation compared to status quo)
Impact on Historic Parks and Gardens	'Seek to avoid' – see CPRSS, Table 3.1	Significant impact on Langleys and Hylands	Potential increase to current OHL impact on Boreham House (though undergrounding 132KV line could mitigate compared to status quo)
Impact of Agricultural Land Quality	NPPF, para. 178	Mainly Grade 2	Mainly Grade 3
Coastal or inland?	Duty to avoid coastal habitats with protected species	Inland <i>CPRSS e.g para 7.5.40</i>	Inland <i>CPRSS e.g para 7.5.40</i>
Net landscape impact compared to status quo	NG, Our Approach to Consenting 2002. Also summarized in CPRSS, para. 3.2.10	Strongly negative, as corridor is currently free from transmission infrastructure and most other forms of development	More neutral, as corridor already negatively impacted by A12 (noise and visual) and 2 x OHLs. Some positive impact potential if 132KV line rationalized.

Please note that the attached Report from Alison Farmer Associates provides a far more detailed and professional comparison of the landscape issues involved and comes to a similar conclusion.

Opportunities for mitigation and net gain

CPRSS states at para. 3.2.10:

In relation to corridor options for overhead lines, the principal opportunities were:

- *the potential to route parallel in close proximity to existing 400kV overhead lines, and thus restrict the geographic extent of environmental effects associated with such infrastructure; and*
- *the potential to provide mitigation through the rationalisation of existing 132kV overhead lines, and thus reduce the level of environmental effects arising from electricity transmission and distribution infrastructure.*

This summarises NG's Approach to Consenting.

The Council welcomes this approach. Para. 7.2.3 shows that it was raised in relation to routeing around Chelmsford as it states:

Further west (of the Colchester area), the presence of the 400kV 4VB route and adjacent 132kV overhead line between Braintree and Rayleigh, may offer an opportunity for the new connection to close parallel the 4VB route and an opportunity for mitigation through the removal of the 132kV line

However, there is no evidence that this approach has been followed through robustly or with determination. Instead, para 7.5.24 concludes that:

The use of Section L provided an opportunity to close-parallel the existing 4VB overhead line. However, it was found to introduce additional routing and technical construction/delivery complexity due to the requirement for multiple crossings of the 4VB overhead line in constrained areas and the mitigation of an existing 132kV overhead line which parallels the 4VB overhead line for the western leg of the corridor. The crossing of the 4VB and 132kV overhead lines at the A12 / A130 is more constrained and as such more technically challenging than the possibilities for crossing these assets in Section K, thus Option ET5 was less favourable than ET1.

The reference to the 132KV line (underlined) suggests that its removal has not factored to any attempt to reduce this complexity. Nonetheless, the conclusion does not state that these crossings are unfeasible, only that they would lead to more technical complexity. And Option ET5 is still £1M cheaper than ET1 on the basis of applying 'normal industry 'best practice' mitigation measures' (CPRSS, para. 7.5.25).

Clearly the potential removal of the 132KV line must be considered because:

- it may have a bearing on reducing the technical complexities referred to
- it might allow effective 'close paralleling' in this section as it might introduce flexibility to better site the new pylons in relation to the existing 440KV pylons in order to prevent 'wirescape'
- it crosses the Chelmer and Blackwater Navigation Conservtaion Area at its widest point; a new 440KV line could cross at a narrower point (as the existing 440KV does)
- it could create a net gain for the village of Sandon
- it is required by the NG *Approach to Consenting*.

The Council therefore requests that this potential mitigation is thoroughly investigated and a full assessment published.

17. Do you have further comments about our materials, consultation process or any suggestions for how we can improve our consultation?

In terms of process, the lack of genuine options and the way in which experts have already decided on a preferred option are fundamental flaws in the consultation process. These issues are detailed in our responses to Q.4 a), c), d) and e). Please refer to them for full details.

In addition, the lack of warning about the consultation and not allowing for the additional Jubilee Holiday period have been significant issues. Our planning authority (Chelmsford City Council) is quite clear that it was not consulted previously – only asked where new housing sites would be located.

The question about materials (and Q.s 12 -16) are perhaps best answered by members of the public. Anecdotal evidence we have received reflects our concern about the lack of genuine options. Also, parishioners have found the webinars and consultation events too few and simply a re-iteration of the 'expert view.'

Compared to normal planning consultations (e.g. for local and neighbourhood plans), it appears that NG's approach to consultation is more about telling the public why its experts have already reached decisions; rather than inviting the public to play a meaningful role in reaching decisions.