



East Anglia Green
Non-Statutory Consultation
Comments of Suffolk County Council

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Introduction

- 1.1 These comments of Suffolk County Council (SCC) are in response to the non-statutory consultation held between the 21 April and 16 June 2022 by National Grid Electricity Transmission (NGET) upon the East Anglia Green (EAG) proposals to build a new 400kV electricity transmission line between Norwich and Tilbury.
- 1.2 The entire scheme is 179 kilometres (111 miles) in length and crosses parts of Norfolk, Suffolk, and Essex. The Suffolk section is 53 kilometres (33 miles in length) and crosses parts of Babergh and Mid Suffolk District Councils. The scheme also crosses the Dedham Vale Area of Outstanding Natural Beauty (Dedham Vale AONB) on the border with Essex.
- 1.3 The SCC electoral divisions directly affected include the following:
 - Hartesmere
 - Thedwastre North
 - Upper Gipping
 - Stowmarket and Stowupland
 - Thredling
 - Bosmere
 - Cosford
 - Gipping Valley
 - Belstead Brook
 - Samford
- 1.4 This representation sets out in the first section the SCC's key issues, with the second part (in Appendix A) providing detailed technical comments. Appendix A explains where those technical comments have derived from the SCC's in-house staff and where they have involved input from external bodies. Given the extent and nature of the matters of concern to the SCC it was not practical for them to be expressed using the format of NGET's consultation feedback form.

SCC Energy Infrastructure Policy

- 1.5 SCC adopted its Energy Infrastructure Policy in February 2021, setting out its overall stance on projects required to deliver the UK's Net Zero ambitions. The policy is relevant for the SCC's position on the EAG proposals, and states:

“Suffolk County Council has declared a Climate Emergency and is therefore predisposed to supporting projects that are necessary to deliver Net-Zero Carbon for the UK. However, projects will not be supported unless the harms of the project alone, as well as cumulatively and in

combination with other projects, are adequately recognised, assessed, appropriately mitigated, and, if necessary, compensated for.”¹

- 1.6 SCC will follow this approach in this Representation, and throughout the DCO process.
- 1.7 SCC continues to be willing to work with NGET through the issues, towards improvement of the proposals and required mitigations, and looks forward to further engagement over the coming months.

¹ See SCC Energy and Infrastructure Policy:
<https://www.suffolk.gov.uk/assets/suffolk.gov.uk/strategic-electricity-networks/SCC-Energy-Policy-230212.pdf>

Key issues

SCC Objection

- 1.8 SCC recognises the importance of the EAG proposals as part of the nationally required infrastructure to connect energy developments that will reduce carbon emissions, to decarbonise the grid, improve energy supply resilience, and help to meet the challenges of climate change. For reasons given below however, SCC has no option but to object to this proposal as it stands.

Offshore Centred Approach

- 1.9 SCC's clear preference is for a coordinated, offshore centred approach, delivered at pace, to minimise onshore infrastructure in Suffolk. If this approach can deliver an alternative to East Anglia GREEN in a timely manner, without risking wider Net Zero, renewable generation, and decarbonisation targets, it would be welcomed by the Council and the communities it represents.
- 1.10 SCC considers that in the consultation documentation, National Grid Electricity Transmission (NGET) have not presented a comprehensive and conclusive set of evidence that the transmission objectives of this project cannot be met using an offshore link or links, with less harmful impacts on the terrestrial environment.

The Need Case Presented by National Grid

- 1.11 With the Government's target of having up to 50GW of installed wind power in place by 2030, NGET's strategy is to establish a series of connections along the east coast of the UK, all the way from Scotland to the south of England. In the supporting information of the EAG consultation, NGET states:

"The existing network in East Anglia currently carries around 3,200 megawatts (MW) of electricity generation. Over the next decade we expect more than 15,000 MW of new generation and 4,500 MW of new interconnection to connect in the region. Our existing power lines do not have sufficient capacity to accommodate this new generation. We are already carrying out work to upgrade the existing transmission network in East Anglia, however even with these upgrades the network will not be sufficient. EAG is a key part of our wider investment programme to upgrade our electricity transmission network in East Anglia to ensure we meet this future energy transmission demand."

- 1.12 The EAG proposals include the construction of a new substation at Lawford, which would be capable of connecting four offshore wind farm projects. Two of these projects, namely North Falls and Five Estuaries, are already progressing through pre-application public consultation. In addition, NGET are seeking to improve the resilience of electricity transmission between Norwich and Bramford, so that if two circuits fail, two circuits would remain operational.

The Alternative of an Offshore Link

- 1.13 The discussion of offshore options in the Corridor and Preliminary Routeing and Siting Study Report (CPRSSR) is considered by SCC to be opaque and difficult to follow in terms of why the only offshore option to be progressed (as a separate project) is the Sea Link (Sizewell to Richborough). The constraints

that have precluded taking forward offshore options of HVDC Cables for Norwich to Grain and Richborough to Sizewell, in conjunction with an AC Overhead line from Bramford to Tilbury (collectively Reinforcement Option East 12) are not readily apparent from the CPRSSR. Nor is it apparent why there is such a marked disparity in the cost benefit analysis between Option East 12 and NGET's preferred Option 7, when both include an offshore cable from Richborough to Sizewell and both include an Overhead line from Bramford to Tilbury. SCC remains concerned that offshore options have been too readily discounted.

- 1.14 In their presentations online to the public, NGET have said, that the proposed new line will have a capacity of 6GW and therefore, given that a single offshore DC (Direct Current) undersea cable is 2GW, to replicate the project offshore would require 3 x 2GW cables. As these would be DC, and the on-shore grid is AC, the electricity must be converted, at each end of these undersea cables. This would require a total of six 5ha substations about 25m high, three in Norfolk and three in Essex.
- 1.15 In addition, National Grid have set out the following in the FAQs on the project website²:

“Offshore solutions were considered as part of our strategic proposal to upgrade the network in East Anglia. The Corridor and Preliminary Routeing and Siting Report examines several strategic options that were considered for East Anglia GREEN that might achieve the required reinforcement including offshore and subsea options. These options were not taken forward as they did not fully address technical or physical/geographical constraints or enable the network to operate to the required standards.

A subsea connection would have a third of the capacity of the proposed overhead connection and therefore to transfer the anticipated levels of power generation, three subsea connections would be required including associated infrastructure such as convertor stations. This would make the connection significantly costlier to energy bill payers.

In addition, an offshore option would still require development of onshore infrastructure. This would include onshore connections from Norwich, Bramford and Tilbury respectively to the coast. The onshore work is required to reinforce the existing onshore transmission network and ensure that we can continue to operate the transmission network safely and securely with the increase of generation connecting into the East Anglia area”

- 1.8 Finally, NGET have set out a rationale for the project in relation to system resilience and flexibility in their FAQs:

“Our project is required to increase network capacity across multiple onshore power flow boundaries and the option we have taken forward provides a very low economic cost per MW compared to the multiple offshore HVDC links that would be required to match the capacity of this option. EAG crosses three onshore power boundaries, but being onshore, it also connects into our Bramford substation roughly halfway

² <https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/east-anglia-green-faqs>

along the route. This allows additional system flexibility that would not be delivered by a pure subsea connection. The advantages are that there are more ways the power can flow into the wider transmission network during maintenance or faults on the system. The onshore proposal has more linkages to the rest of the network as well as being economically lower cost to deliver.”

- 1.16 Whilst these FAQ answers are helpful in setting out National Grid’s position, SCC considers that more comprehensive and cohesive evidence is required to show that an offshore link or links is not a feasible or desirable alternative.
- 1.17 SCC acknowledges the strategic option appraisal work in the CPRSSR but does not consider it to provide an adequate explanation of NEG’s reasoning for discounting a more extensive offshore solution.
- 1.18 The CPRSSR³ identifies a scenario, consisting of the Norwich to Tilbury line, in conjunction with an offshore link between Sizewell and Richborough, and an overhead line between Grain and Tilbury, as the most cost effective and efficient solution⁴. This package is identified as East 7 and has a capital expenditure of £2,189.75m.
- 1.19 The CPRSSR also states, in section 1.3, “Identifying the Preferred strategic proposal for EAG” that:
- “Conceptually, connections can be made from either the Necton / Norwich area or Sizewell area down to locations such as Grain or Tilbury, to connect into London or into Kent, such as [at] Richborough, to connect with interconnectors. Marine DC options are included within options taken forward to appraisal”⁵
- 1.20 The CPRSSR also includes a scenario consisting of an offshore link from Norwich to Grain, in addition to the Sizewell to Richbrough offshore link, however the Bramford to Tilbury and Tilbury to Grain Overhead lines were retained. This package is identified as East 13 and has a capital expenditure of £4,176.14m. This scenario has the largest element of offshore cabling of those included in the CPRSSR.
- 1.21 Whilst this report is extremely helpful in allowing a partial understanding of how the preferred package of measures was arrived at, it is not helpful in setting out, simply, what an offshore maximum counterfactual scenario might look like, or setting out the rationale as to why this cannot be achieved. Furthermore, the scenario planning set out in the CPRSSR cannot take into account the forthcoming Holistic Network Design or the revised Network Options Assessment, which is due to be published at the end of June 2022.
- 1.22 Therefore, SCC requests that this material is set out after the end of June 2022, to provide a clear rationale as to why the option of a maximum offshore alternative, to the EAG proposal has been discarded.

³ <https://www.nationalgrid.com/electricity-transmission/document/142461/download>

⁴ Table 1.1 p16

⁵ Page 10

- 1.23 SCC considers that there is a precedent for such an approach, given the publication, in response to stakeholder feedback⁶, of a further report by WSP - Parsons Brinkerhoff, assessing the viability of an HVDC offshore option for the connection of the Horizon nuclear project at Wylfa.
- 1.24 Given that both the strategic and operational network issues will need to be addressed, it is anticipated that this would need to be a joint NGET ESO report, and may also require input from the regulator, Ofgem.

Onshore Proposals

- 1.25 SCC also considers that there are significant shortcomings within the submitted proposals, that would be required, in the event that the preferred offshore centred approach, delivered at pace, to minimise onshore infrastructure in Suffolk cannot be delivered. Substantial and significant amendments must be made to this project to reduce the adverse impact on the communities and the environment of Suffolk and realise the potential additional benefits that could accrue from this project.
- 1.26 Until these shortcomings are addressed, SCC cannot support the specific proposals put forward to date by NGET, in respect of EAG.

Parallel Routing with the Existing Line

- 1.27 In principle, SCC would have considered that (subject to its comments below on the need for a clearer justification for discounting an offshore link for all or part of the route) if an onshore option is to be proposed a close alignment of existing and proposed pylon lines was likely to be preferable, as is the case with the Bramford to Twinstead 400 kV grid reinforcement project. SCC understands that this was also NGET's initial preference, as it is the shortest and most direct route, and minimises the spread and proliferation of lines across a wider area.
- 1.28 However, closer examination of this option has shown there are too many obstacles to allow this, including homes, residential curtilage, businesses, and existing infrastructure. Therefore, a route corridor further west has been selected. Furthermore, according to NGET, the close parallel option would require construction of new pylons first on one side of the existing route and then sometimes on the other side of the existing route, coupled with the need to switch the existing cable run between old and new pylons during construction, creating the need to shut down transmission on the existing connection over extended periods.
- 1.29 We note that the Holford and Horlock rules have been used as a guide to routeing and siting of new infrastructure, however we would advise further details on the existing constraints are provided to justify the new routeing proposals.

Bramford Substation

- 1.30 The substation provides a means of connection for multiple energy projects including from within the local area and from much further afield. The EAG proposals must seek to minimise the impact upon local residents and

⁶ Para 3.5 in https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN020015/EN020015-001041-9.8.3_Historic%20Strategic%20Options%20Report%20-%202016%20Update.pdf

environment as a whole. Proposals must take into account cumulative impacts from the other projects both in respect of construction and operation.

- 1.31 The Council also considers that a full wirescape design review in the Bramford area is now essential, involving both this project and BTNO as well as the UKPN 132kV network in this area. This is necessary to identify further options for mitigation and infrastructure reduction, to minimise adverse impacts on the host communities. The Council recognises, and expects, that this will require effective collaboration between NGET, UKPN, and Ofgem.

Additional Undergrounding

- 1.32 SCC does not believe that the current or emerging planning policy framework for transmission projects, *National Policy Statement for Electricity Networks EN-5*, can support *widespread* undergrounding⁷. However, the new draft policy does support a range of mitigation measures, including undergrounding in sensitive areas outside nationally designated landscapes.
- 1.33 SCC seeks modification of the proposals as presented at this consultation stage, to include, subject to full assessment by the Applicant, further mitigation including potentially additional areas of undergrounding. SCC proposes to work with other local authorities and the Dedham Vale AONB Project Board to provide the evidence required to justify undergrounding in time for the proposals to be amended in advance of the scoping stage scheduled for later this year.

Undergrounding in the Waveney Valley

- 1.34 SCC considers there to be a robust case for undergrounding on specific stretches where the line crosses the Waveney valley, as this is supported by draft National Planning policy, noting that the routing and method of this will need to avoid harm to Wortham Ling SSSI. The present proposals involve overhead lines crossing Bressingham Steam Museum and Gardens in attempt to avoid other constraints (highlighted in yellow on Maps 1 and 2 respectively which are appended below). This raises significant concerns and should be avoided unless there is a clear case that alternatives are not reasonably achievable.

Undergrounding in the Gipping Valley

- 1.35 Where the proposed lines cross the Gipping Valley, SCC seeks undergrounding; this would also result in the avoidance of substantial harm to the assemblage of listed buildings around St Mary's Church, Badley (highlighted in yellow on Maps 6 and 7 which are appended below).

Undergrounding in the Dedham Vale AONB

- 1.36 SCC welcomes the proposals to underground the section which runs through the Dedham Vale AONB. Siting of the Cable End Sealing compounds so that they avoid significant harm to the Dedham Vale AONB will also require careful consideration. Within Suffolk, it is anticipated that a site potentially to the north of Holton St Mary would need to be found which would also not impinge on the flying activities at Raydon Airfield or cause significant harm to the villages of Little and Great Wenham (highlighted in yellow on Maps 11 and 12

⁷ Para 2.11.20 in https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1015238/en-5-draft-for-consultation.pdf

which are appended below). SCC considers that, subject to detailed proposals, there may be a case to extend the undergrounding beyond the boundary of the AONB if there is an impact of any overground structures on the setting of the AONB.

Undergrounding to the North of Lawford Substation

1.37 Although within Essex, SCC fully supports the Dedham Vale AONB Project Board and Essex County Council in asking for undergrounding of the lines as they leave Suffolk and the AONB and approach the Lawford substation because of the potential impact upon the Dedham Vale AONB and the local residents close to the proposed substations who would potentially be boxed in by lines travelling both to and from Lawford substation.

Undergrounding to the South of Lawford Substation and the Dedham Vale AONB

1.38 Although within Essex, SCC fully supports the Dedham Vale AONB Project Board and Essex County Council in asking for undergrounding of the lines as they leave Lawford substation because of the potential impact otherwise on the Dedham Vale AONB and the residents close to the proposed substations who would potentially be boxed in by lines travelling both to and from Lawford substation. Undergrounding would also remove the potential to disrupt flying activities at the historic Boxted airfield.

The Potential use of T-Pylons

1.39 Further consideration should be given to the use of the alternative, shorter, T-pylon design for the project as a whole. This would be consistent with the approach taken in the past to the development of the Bramford to Twnstead project⁸. An assessment of this option should consider the relationship of the new and existing lines, including the potential impacts of mix of design styles along the Norwich to Bramford section of the proposals

The Removal of Obsolete 132kV Pylons

1.40 SCC considers that there are opportunities for the EAG project to facilitate the removal of 132kV pylon lines operated by UK Power Networks, to rationalise and improve the network resilience overall, whilst reducing the cumulative visual impact of energy infrastructure, and compensating for the additional visual impact of the new East Anglia GREEN power lines. Such an approach appears to be consistent with the British Energy Security Strategy.⁹ It appears there may be opportunities for rationalisation of this 132kV network, around Needham Market, and between Diss and Stowmarket¹⁰ (for example the existing 132kV line between Bramford and Lawford substations, highlighted in blue on Maps 10, 11 and 12 which are appended below). The Council recognises, and expects, that this will require effective collaboration between NGET, UKPN and Ofgem.

⁸ Para 4.14 <https://www.nationalgrid.com/electricity-transmission/document/137436/download>

⁹ <https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy#networks-storage-and-flexibility>

¹⁰ https://dgmapp.ukpowernetworks.co.uk/site/?q=dgmapping_ext_open

- 1.41 Therefore, a *Distribution System Options Report*¹¹, should be produced for this project, to ensure that all the potential environmental and electricity system and economic benefits of this project are fully realised.

The Avoidance of Heritage Assets

- 1.42 It is also expected that the refined routing will need to have significant regard for sensitive receptors such as Mellis Conservation Area highlighted in yellow on Map 2 and Thornham Park highlighted in yellow on Map 3 (both appended below).

The Avoidance of Airfields

- 1.43 The proposals as currently drafted have potentially serious implications for a number of airfields including the following:

- Burgate (see marked in green on Map 2 appended)
- Wattisham (see marked green on Map 8 appended)
- Elmsett (see marked in green on Map 9 appended)
- Raydon (see marked in green on Map 11 appended)
- Boxted (Essex)

- 1.44 In the interests of the amenity of users of these facilities, national defence and the general aviation industry in the area, the proposals should allow for their continued and safe use and if necessary amended.

Mitigation Measures

- 1.45 SCC considers that, notwithstanding embedded mitigation and potential modifications to the scheme as proposed above, it will be unavoidable for the development to result in residual impacts on the community and locality, including on amenity, loss/reduced quality of recreational opportunity for the community, culture and heritage, and health and wellbeing. SCC expects appropriate and robust mitigation for such residual impacts, which could be, for example, include funding for alternative outdoor recreational offers, access and amenity improvements, cultural and heritage enhancements.

Community Benefits

- 1.46 Secondary mitigation would be in addition to any potential community benefits from the development, including any emerging requirements in the consultation on Community Benefits foreshadowed in the British Energy Security Strategy. We would encourage the project promoter to also consider such community benefit options and would be happy to discuss further options suitable for the locality. SCC also seeks project promoters to consider legacy opportunities of all elements of their development.

Skills Training Measures

- 1.47 In terms of skills SCC is seeking for NGET to foster the local skills base in energy related industries within an area which is destined to host numerous energy related infrastructure projects. Therefore, financial measures in respect of relevant skills training within the local area should be agreed.

¹¹ <https://www.nationalgrid.com/electricity-transmission/document/137461/download>

There must also be adequate assessment of the likely origins of the labour force (both local and non-local), especially in the context of other energy projects with potentially overlapping construction periods.

Tourism Mitigation

1.48 SCC anticipates that the proposed development, given its location which is located across the Dedham Vale AONB and other rural areas of Suffolk of importance to the tourism economy, could have significant impacts upon visitor accommodation (in the construction phase), visitor perception, and ultimately visitor numbers, both during construction and during operation, hence financial support to offset the detrimental impact of construction upon, in particular, tourism in the DV AONB and other areas should be agreed.

Retention of Construction Bridges

1.49 Proposals for the retention of bridges and tracks required for construction to improve public access to the area should be included, which could provide a legacy benefit for the local community.

Cable Sealing End Compounds

1.50 Their location, design, and impacts will need careful consideration to minimise their land take and impacts on the receiving environment, particularly within or close to designated or other sensitive areas (especially given that SCC wishes to see more undergrounding). Their location, design, should be sensitively and appropriately located, with the use gantries, rather than terminal towers, to further reduce their visual impacts.

Traffic and Transport

1.51 SCC is concerned to ensure these impacts are fully assessed and mitigated, especially as regards construction traffic impacts on SCC's rural road network and the limited options for suitable HGV and AIL routes once the EAG route alignment has been chosen. Decommissioning/removal also needs careful consideration.

Land-Use Planning

1.52 In the context that in the CPRSSR the focus has been predominantly on other DCO projects as a potential constraint. It is unclear whether account has been taken of unimplemented permissions or adopted local plan allocations for residential, commercial, or leisure/recreational developments in selecting the route of the EAG. Only minerals allocations are mentioned (and then discounted). Whilst district colleagues are best placed to comment on the detail, the consideration of land use planning should not be limited to other DCO projects.

Cumulative Impacts

1.53 This is an important issue given the numbers of infrastructure and other developments proposed across SCC's area and the need for a full assessment of environmental and socio-economic impacts of the cumulative effects of the EAG in conjunction with those other projects.

Other Issues

Further Information Requirements

- 1.54 As expected at this stage of the development of the EAG proposals an enormous amount of background information remains to be presented at the Statutory Consultation stage within the Preliminary Environmental Impact Report. Appendix 1 sets out the responses from internal consultees which highlight in particular where the gaps in knowledge are in respect of the receiving environment and methodological requirements lay. It is expected that further adjustments to the proposals are likely to be required as greater knowledge is gained of the environment.

Appendix A – detailed technical comments

1. Introduction

- 1.1 Suffolk County Council (SCC) has been liaising with Babergh & Mid Suffolk District Councils, the other County and District Councils along the route, as well as the Dedham Vale Area of Outstanding Beauty Project in gathering the technical information below.
- 1.2 As part of this activity Essex Place Services (EPS) have been instructed to provide a response to ecology, landscape and built heritage aspects. Where EPS contributions have been provided this has been identified and SCC endorses the EPS contributions on these matters.
- 1.3 The full list of technical comments is as follows:
 2. SCC Archaeology
 3. EPS Ecology
 4. SCC Economic Development
 5. SCC Emergency Planning
 6. SCC Floods
 7. SCC Highways
 8. EPS Historic Environment
 9. EPS Landscape
 10. SCC Public Health
 11. Public Rights of Way
 12. SCC Planning Authority

2. SCC Archaeology

Overview

- 2.1 The proposed scheme is for 180km of electricity infrastructure between Norwich and Twinstead, with a substation at Tendring in Essex. Currently, the proposal is for overhead lines and steel-lattice pylons for most of the route, with underground cables through the Dedham Vale Area of Outstanding Natural Beauty (AONB).
- 2.2 Suffolk County Council Archaeological Service (SCCAS)'s primary role in relation to the scheme is to advise on below-ground archaeological remains in Suffolk, although SCCAS offer some comment on other aspects of the historic environment. With regard to designated heritage assets, built environment and landscape, SCCAS advise that opinions are sought from Historic England, Local Authority Conservation and Design Teams, and relevant Landscape Advisors.
- 2.3 SCCAS set out here high-level advice on specific areas of sensitivity in the preferred corridor, drawing on information in the County Historic Environment Record (HER). SCCAS also set out the further work that is required to ensure that siting/routing decisions and an application are based on an appropriate understanding of the impacts of the scheme on below-ground archaeological remains. SCCAS set out some areas where early assessment would be beneficial for siting/routing, and also set out expectations for work to inform an EIA, also including early upfront work.
- 2.4 As set out above, the Council has identified additional areas for potential undergrounding, in accordance with draft EN-5 paragraph 11.2.20. These are in the Waveney Valley, Gipping Valley, the area north of Bramford, Flowton and the area north of the AONB towards Raydon. River valleys and the slopes above them generally have high potential for archaeological remains. Given the size and scale of the impact of undergrounding - spanning areas equivalent to that of multi-lane highways – SCC recommends that additional areas of proposed buried cabling would involve a corresponding need for early and thorough evaluation, to characterise remains, assess the impacts of the scheme and to inform mitigation strategies.

Impacts of the scheme

- 2.5 The impacts of the scheme vary along its length, but aspects with groundworks that have the potential to destroy or damage archaeological remains include:
 - Undergrounding in the Dedham Vale AONB, 65-100m corridor for up to 18 cables, with jointing bays and associated potential widening of the easement corridor (the most significant in scale aspect of the scheme).
 - Potential undergrounding to pass under the Bramford to Twinstead Lines
 - Potential undergrounding in additional areas identified by the council
 - Cable sealing end compounds (30x80m) and access tracks
 - Construction compounds and other temporary land-take for construction (including HDD sites and offsite transport enhancement)
 - Biodiversity offsetting areas and other offsite mitigation.
 - Works around Bramford substation

- Pylons

Siting and routeing methodology

- 2.6 The *Strategic Options Appraisal* is based on designated assets only (Scheduled Monuments, Battlefields, Conservation Areas, Listed Buildings), and sets out the intention to avoid or minimise impacts on them. National Grid acknowledge that the scheme also has potential to impact archaeological remains and recognises the need for assessment and mitigation work, although the *Corridor and Preliminary Routeing and Siting Study* does not include detailed reference to information in the Historic Environment Record at this stage.
- 2.7 For the proposed overhead lines between Norwich and Bramford, it is stated by the promoters of the scheme that:
- below ground archaeological remains have not been a differentiating factor in route options
 - the preferred option is considered deliverable 'subject to normal routeing and siting practices'
 - 'impacts will be considered in later stages of design to ensure that effects on remains and constraint to design, consent and delivery can be better understood and managed'
 - Effects could be effectively managed through careful routing and an agreed scheme of investigative mitigation.
- 2.8 Given the width of the present corridor proposed for overhead lines and the general nature of impacts, SCCAS broadly agree with the above stance. However, SCCAS highlight below some known non-designated sites within the route corridor which could present constraints to routing options within it, particularly if preservation *in situ* of remains is appropriate (for example, if they are of significance equivalent to designated sites of national importance, as per footnote 63 of the National Planning Policy Framework). Targeted further assessment should therefore be brought forward to an early stage, to inform refinements.
- 2.9 For the area of undergrounding in the AONB, the promoters of the scheme note additionally that there is likely to be a significant requirement for survey to support consenting, and post-consent mitigation. SCC agrees and offers further comment below. The pinch-point at the proposed crossing of the Stour has known high archaeological sensitivity.
- 2.10 Further, cost has been assessed as a differentiating factor, but at this stage, prior to detailed assessment, the costs of archaeological work can only be estimated. There is potential for costs to be relatively high.

Specific considerations for routing

- 2.11 There are numerous sites and finds recorded in the HER for the corridor and in the landscape around it. SCCAS offers some comments on certain sites at this stage, based on a high-level review, although this is not exhaustive and, as the area with the proposed corridor has largely not been subject to systematic archaeological evaluation, there is high potential for additional and as yet unknown heritage assets to be encountered. Codes used are HER

numbers. Further information for background only can be found on our website <https://heritage.suffolk.gov.uk/> in the publicly accessible version of the HER. Further consideration needs to be given to archaeology and as a minimum, a Historic Environment Record search and critical review of archaeological potential is advised as part of baseline data gathering to further inform siting and routing.

- 2.12 Within the corridor for the currently proposed overhead lines, there are several sites where SCC would, on the basis of current information, advise that avoidance is appropriate. Further assessment should be undertaken to ensure that this is possible within the parameters of routing decisions. Sites include:
- prehistoric funerary monuments at Cotton, Mendlesham, Creting St Peter and Badley (COT 016, MDS 078, MDS 121 and MDS 122, CRP 008, BAD 005, BAD 006, BAD 007)
 - prehistoric enclosures at Creting St Peter (CRP 002)
 - areas of prehistoric occupation at Wortham and Mellis (WTM 010, MLS 007)
 - an area of Iron Age and Roman settlement at Stowupland (SUP 009)
 - Roman lead coffins may indicate a wider cemetery at Great Wenham (WMM 002)
 - a probable Roman villa site at Wickham/Finningham, which is of sufficient size and scale that it may create a pinch point (WKS 013, WKS 003), situated on a south facing slope overlooking the River Dove, west of the Roman Road at Wickham Street – the extent and potential sensitivity of this site may present a constraint to micro-siting
 - A large scatter of finds indicating a Roman site at Barking (BRK 117), also associated with a Roman Road line (RGL 006)
 - Iron Age/Roman/Saxon occupation at Badley (BAD 016 and BAD 020)
 - finds scatters indicative of a Roman and Anglo-Saxon cemetery at Palgrave/Wortham (PAL 034 and WTM 050)
 - areas of Saxon occupation at Wortham (WTM 010)
 - a possible church site at Wortham (WTM 036) and sites around the church at Creting St Peter (CRP 004),
 - moated sites at Creting St Peter, which the authors note may be a possible Adulterine Castle (CRP 001)
- 2.13 SCCAS notes several Scheduled Monuments within or near the corridor. Offton Castle (OFF 002) is mainly outside the current corridor, although some of the scheduled area lies within it. The route also passes very close to Wenham Castle (WMP 001). A scheduled monument is also present within the corridor at Stratford St Mary (mill mound, formerly thought to be a henge), SSM 011. Historic England will advise on impacts on the monuments and their settings.
- 2.14 For proposed undergrounding, there is high potential for impact on remains. In particular, the pinch-point where the route crosses the Stour Valley is an area of high archaeological complexity and sensitivity. It is likely that other/discounted options for crossing points in this archaeologically sensitive landscape would also have implications, but for the favoured route there is a complex of sites on the northern valley side of the Stour that requires further assessment. This comprises an extensive cropmark complex of rectangular and curvilinear enclosures and ring ditches of unknown date and significance,

which likely represents early, multiperiod occupation (HGM 001, HGM 005 – HGM 013, HGM 017), and which spans the width of the corridor. The Church of St Mary is also in this area (HGH 014). Early assessment may inform design options for HDD and the location of drill sites to minimise disturbance to archaeological remains. SCCAS therefore advises early geophysical survey of the whole width of the crossing point and somewhat northwards of Higham Road, to inform siting decisions, design and to inform on mitigation measures. SCCAS also advises early archaeological trial- trenching to ground truth the results. SCCAS notes that further work would be undertaken to identify the most appropriate location for CESC sites and that further exploration of landscape features is proposed and advise also that they should be subject to archaeological evaluation.

- 2.15 Finally, additional areas of undergrounding would affect valley sites. There is potential for well-preserved stratified sites in and on the valley sides, and for wet deposits that contain valuable organic remains, as well as complex sites in areas that are topographically favourable. The Waveney Valley has very high potential for archaeological sites for all periods, and high potential for preserved organic remains in the deep peat soils. There is also very high archaeological potential around the Gipping Valley, where there are high numbers of complexes of cropmarks. The cropmark complex at Creting St Peter highlighted above is at a confluence of several tributaries of the Gipping. There is also particular sensitivity as the route approaches the lighter soils and contours of the tributary valleys of the Stour, which may be impacted by undergrounding further towards Raydon. Historic water meadows may also be a consideration. Early work should be undertaken in these areas.

Expectations for EIA

- 2.16 In accordance with National Policy Statements for Energy, EN-1 and EN5, SCCAS would expect an Environmental Impact Assessment to be informed by a suite of evaluation techniques – including trial trenched evaluation - so that it fully assesses the character, extent and significance of the heritage resource and allows the impacts of development to be comprehensively understood and mitigation proposed. There is high potential for additional and to date unknown heritage assets to survive across much of this area. Some of these may be of national significance and worthy of *preservation in situ*.
- 2.17 In advance of EIA scoping, we advise that it should include the following:
- **Desk-based assessment**, based on a commissioned HER search, which draws on landscape, soil type, historic landscape character and topography to provide critical assessment of potential as well as known sites. DBA should draw on the HER's supporting archives and should include a historic map regression (including tithe and estate maps), a study of aerial photography (including historical imagery) and any other multi-spectral data, an assessment of LIDAR data. Datasets held by the County Records office and other archive sources should also be consulted where features merit more detailed research. SCCAS would be happy to discuss a search buffer in more detail.
 - **Landscape** should be considered for assessment as an aspect of the historic environment and to set the archaeological resource into context. Assessment of the impact of the proposals upon historic hedgerows, boundaries, protected

lanes, historic water meadows and other historic landscape elements such as moats, tracks, woodlands, routes and settlements should also be considered

- Specialist modelling and **assessment for impacts on Palaeolithic/Mesolithic sites.**
- **Deposit modelling and paleoenvironmental work** to provide further information on likely waterlogged sites with correspondingly good organic preservation, particularly in river valleys. This would also identify whether there are likely to be sensitive sites in the vicinity of the scheme where the potential impact of changes in water-level should be considered.
- **Earthwork survey and building assessment** should be undertaken of upstanding remains, so that extant earthwork sites can be avoided - the significance of any earthworks should be assessed, alongside the impacts of proposals on them.
- **Geophysical survey** (a combination of magnetometry and resistivity as appropriate), across areas of major impact and other areas, subject to sensitivity – including survey of a widely buffered area to allow consideration of options.
- **Fieldwalking/metal detecting of key sites**
- SCCAS advise that it is best practice for all sites which will be impacted on by any element of the works should be subject to a full programme of **trial trenching** at EIA stage. This will inform design, project programming and risk management, avoiding unexpected costs and delays post-consent that would arise from a poor understanding of the impact on below ground archaeological remains. It will also inform timescales and reveal any implications for other EIA topic areas. Overall, SCCAS would expect trial trenches equivalent to 5% by area survey of the area of ground impacts, although would consider the results of non-intrusive survey to finalise advice on the scope and timing of trial trenching, where appropriate. There may be different assessment requirements for overhead lines and undergrounding. Large areas, fixed elements, river crossings and other hotspots and pinchpoints are all of high priority. Sites considered to be of local importance would also require mitigation.
- **Proposals for mitigation.** Detailed evaluation may reveal as-yet-unknown sites of local, regional and national significance. Mitigation may include avoidance, preservation in situ (including archaeological management plans), or excavation, recording and publication of the results to allow for the enhancement of public understanding of heritage assets to be impacted by development. Open area excavation will likely form the most appropriate methods for mitigation. SCCAS would expect an EIA to demonstrate clearly that archaeological work has been factored in to project programmes, with sufficient time allowed to enable fieldwork to be completed and avoid delays to the timetable
- **Consideration of interactions** with other topic areas. SCCAS would expect cross linking in the EIA between archaeology and other subject areas (e.g. Construction Management Plans, Ecology, Spoil and Dust Management).
- **Proposal for outreach**, potentially linking up with other projects in the area.

Comments on next steps

- 2.18 SCCAS advises that an archaeological consultant is appointed to the project at an early stage to ensure the smooth delivery of the archaeological requirements for the project alongside other elements of the scheme.
- 2.19 As has been shown by other Nationally Significant Infrastructure Projects in the region time will be a critical factor. Archaeological and heritage assessments and mitigation phases should be programmed into the project at the earliest opportunity, with sufficient time allowed to enable evaluations to be undertaken prior to decisions (e.g. taking into account agricultural cycles and ecological windows and landowner consent).
- 2.20 SCCAS will monitor all stages of the work on behalf of the LPAs/discharging authority for conditions and will produce briefs for all stages of work and review and agree detailed Written Schemes of Investigations.
- 2.21 Provision of GIS data at all stages of projects is very useful.
- 2.22 Several large projects in the area at a given time may put pressure on available archaeological work forces.
- 2.23 In due course, SCCAS would expect to agree condition wording, and the means by which work is secured through a DCO – SCCAS encourages the use of Outline WSIs, which sets out the high-level parameters for a framework for the archaeological work on the scheme as a whole.
- 2.24 SCCAS advises that a Historic Environment/Landscape Stakeholder group is established to facilitate cross-county and cross-administrative area working, and to ensure integrated discussion on holistic approaches to the Historic Environment, particularly where there are considerations and balances between below-ground and landscape impacts.
- 2.25 SCCAS reiterates that increases in the amount of undergrounding for the scheme (for open cut or drill sites for HDD) would mean a proportionally higher impact on archaeological remains and on the amount of assessment, mitigation and intrusive work required.
- 2.26 SCCAS would be happy to discuss the scope of required work at an early stage.

3. EPS Ecology

- 3.1 These comments relate to the East Anglia Green proposal and the scheme design including corridor options to minimise ecological impacts.

Current route and design

- 3.2 We have reviewed the Corridor and Preliminary Routeing and Siting Study Report and appendices as well as the Public Consultation Strategy (all National Grid, April 2022). This provides comments on the North East Anglia connection (Norwich to Bramford) and the South East Anglia connection (Bramford to Tilbury).
- 3.3 We note that the routeing constraints in Tables 3.1 only refer to statutory designated sites and we strongly recommend that non-statutory designated sites e.g., County Wildlife Sites (CWS) are also included as mapped ecological constraints although many are ancient woodland, an irreplaceable habitat. We welcome that the substation siting constraints in Table 3.2 include Priority habitats but again recommend that non-statutory designated sites e.g. CWS are also included to avoid significant ecological impacts as this could trigger the need to deliver compensatory habitat.¹²
- 3.4 We highlight that any undergrounding in visually sensitive areas such as AONBs, may result in increased ecological impacts from trenching and construction of Cable Sealing End (CSE) compounds and we are willing to be involved in fine tuning the locations and methodologies, with site visits as considered appropriate.
- 3.5 We appreciate that the details for ecological survey & assessment for protected and Priority species likely to be present in the Preferred Corridor and would be affected, will come at a later stage.
- 3.6 We note that if any ecology constraints are scoped out of the Options Appraisal, they would still be covered in the Environmental Statement for assessment.

Norwich to Bramford – Sections C-E

- 3.7 We note that the Corridor and Preliminary Routeing and Siting Study Report identifies that the A14 crossing near Needham Market is likely to need a complex assessment which will need to include impacts on the River Gipping and various adjacent waterbodies. Where it is considered that the alignment will need to divert around constraints, we highlight that the aim should be to avoid pylons being placed near to hedgerows and associated hedgerow trees which would consequently be affected.
- 3.8 We welcome the statement in 4.5.27 that all options avoid ancient woodlands (Holford Rule 5) however there is little description of the potential impacts on Redgrave and South Lopham Fens Ramsar which is also part of Waveney and Little Ouse Valley Fens SAC.
- 3.9 Based on the information provided, we support the graduated swathe for Norwich to Bramford based on Option NB1 as the preferred option.

¹² <https://www.suffolkbis.org.uk/habitat>

Bramford to East Anglia Connection (EAC)

- 3.10 We understand that the route in this section, as well as the substation site, will need to fit in with other projects e.g. Bramford to Twinstead NSIP, and we would welcome the opportunity to input local knowledge to this element of the project.
- 3.11 We note that para 5.5.3 recognised that from a Biodiversity and Ecology perspective, Options BE1 and BE2 were considered to perform more poorly than other options due to the potential for a Likely Significant Effect (LSE) on the Stour and Orwell Estuaries SPA and supporting Cattawade Marshes SSSI (which forms part of the SPA). We welcome this as NPS- EN5 states that particular attention will be needed to minimise the likelihood of large birds such as swans and geese colliding with overhead lines associated with power infrastructure particularly in poor visibility.
- 3.12 We recommend that crossing the Suffolk/Essex County boundary needs careful consideration as Swans are a qualifying feature of the Stour & Orwell Estuaries SPA which includes Cattawade Marshes SSSI. We highlight that this would trigger a requirement for a shadow HRA screening report to assess impacts from EA GREEN, either alone or in combination with other plans and projects.
- 3.13 We note that, overall, western options (Options BE3 and BE4) are preferred from a Biodiversity and Ecology perspective as they would not be likely to result in LSEs on these designations. However, with the exception of Option BE3, which contains (though does not route through) the Hintlesham Great Wood SSSI, all options avoid smaller areas of high amenity value or scientific interest (Holford Rule 2). Whilst Options BE3, BE4 and BE5 do contain more areas of woodland than the other options, the corridors are considered to be of sufficient width to allow the identification of alignments which would avoid such woodland. We agree that further work is required as part of the detailed routing process to refine an alignment to comply with this rule as far as possible. Whilst more westerly options are preferred from a Biodiversity and Ecology perspective, Option BE5 is assessed to have the least potential of those that pass through the Dedham Vale AONB to have potential for effects resulting in LSEs on the designations of the Orwell Estuaries SPA and Cattawade Marshes SSSI (part of the above SPA).
- 3.14 Based on the information provided, we support the graduated swathe for Bramford to EAC based on Option BE5 is the preferred option.

Other matters

- 3.15 We are concerned that more information is needed to understand the impacts on hedgerows along the route, particular those that could be important for bat foraging and commuting routes for Barbastelle bats or Dormouse.

Next steps

- 3.16 We seek to inform choices on species options for restoration planting schemes as well as securing temporary mitigation measures during construction.

4. SCC Economic Development, Tourism and Skills

Economic development and skills

- 4.1 As an individual project, National Grid Electricity Transmission – East Anglia GREEN, offers no substantial opportunity in its own right. However, it should be viewed as one of the many individual projects that National Grid Plc via NGV and NGET are delivering in region and SCC seeks to work with National Grid Plc to deliver a package of training, skills and growth opportunities that engages with the local supply chain strategically across all local projects e.g.; Bramford to Twinstead and Norwich to Tilbury overhead lines, Suffolk to Kent marine link, Nautilus, and Eurolink interconnectors alongside this project, East Anglia GREEN.
- 4.2 SCC considers it essential that the inward investment, socio-economic and skills benefits of these projects is maximised, ensuring the best possible outcome for the communities that are hosting this Net Zero transmission, connection and generation infrastructure which has significant impact on them and their environment. Initiatives such as those delivered in Somerset, associated with the Hinkley Point C connection project, where communities have benefited from over £1 million¹³ of community funding and access to an education fund¹⁴.

Tourism & visitor economy

- 4.3 Suffolk offers a rich and varied tourist offer known for its heritage assets, landscape designations and promoted areas, such as, two designated AONBs, the Dedham Vale, Stour Valley, Waveney Valley and Suffolk's Wool Towns. NGET needs to fully assess the direct and indirect impacts of this project and its associated infrastructure on all of these known features and particularly the extent to which the physical infrastructure will impact and detract from the environmental quality of an area for recreational activity. The proposed route will also impact known visitor attractions such as Bressingham Steam and Gardens, Needham Lake, Hintlesham Hall, RSPB Wolves Wood. More broadly, it is also imperative that the project considers its part in the cumulative impact on the perception and propensity of people to visit the area during the works period.
- 4.4 SCC will provide further detail at the statutory consultation stage when the proposed routing of the pylons becomes clearer.

¹³ <https://hinkleyconnection.co.uk/over-1-million-awarded-to-local-communities/>

¹⁴ <https://hinkleyconnection.co.uk/stem-fund-inspires-future-generations/>

5. SCC Emergency Planning

5.1 No issues arising.

6. SCC Floods

- 6.1 The LLFA does not have any objection in principle to the proposals that are proposed within Suffolk, noting that they are still at an early stage of development and there is not yet sufficient detail to assess the interactions between the development, especially the substation and other built structures, and flood risk and surface water drainage.
- 6.2 A site-specific flood risk assessment is to be submitted and the applicant will need to demonstrate that they have consider flood risk and surface water drainage for any permanent and temporary works.
- 6.3 The applicant will be required to submit the following documents as minimum depending on the application type.

Document Submitted	Document Description	Pre-App	Outline	Full	Reserved Matters	Discharge Condition
Flood Risk Assessment (FZ3 or Site >1Ha)	Evaluation of flood risk (fluvial, pluvial & groundwater) to the site – will guide layout and location of open spaces. (SCC may require modelling of ordinary watercourse if EA Flood Maps not available)	✓	✓	✓		
Drainage Strategy/Statement (less detail required for Outline)	Document that explains how the site is to be drained using SuDS principles. Shall include information on:- <ul style="list-style-type: none"> Existing drainage (inc adjacent roads) Impermeable Area (Pre and Post Development) Proposed SuDS Hydraulic Calculations (see below) Treatment Design (i.e. interception, pollution indices) Adoption/Maintenance Details Exceedance Paths 		✓	✓		
Contour Plan	Assessment of topography/flow paths/blue corridors	✓	✓	✓		
Impermeable Areas Plan	Plan to illustrate new impervious surfaces		✓	✓		
Preliminary Layout Drawings (including landscaping details)	Indicative drawings of layout, properties, open space and drainage infrastructure including:- <ul style="list-style-type: none"> Discharge location (outfall) Conveyance network Form of SuDS and location on the site 		✓			
Preliminary Site Investigation Report	3 or more trial pits to BRE 365 and associated exploratory logs (check for groundwater)	✓	✓			
Preliminary hydraulic calculations	<ul style="list-style-type: none"> Discharge Rates (using suitable method i.e. FEH, IH124 (ICPSUDS) or modified rational method (brownfield sites) Storage Volume Long Term Storage (if required) 	✓	✓			

Document Submitted	Document Description	Pre-App	Outline	Full	Reserved Matters	Discharge Condition
Evidence of any third party agreements to discharge to their system (i.e. Anglian Water agreement or adjacent landowner)	Evidence of any permissions or permits being obtained.		✓	✓		
Detailed Development Layout and SuDS Provision Plan (including landscaping details)	Dimensioned plans showing the detailed development layout including SuDS components, open spaces and exceedance corridors.			✓	✓	✓
Full SI Report	Detailed assessment of ground conditions – leading on from initial testing <ul style="list-style-type: none"> Widespread coverage of trial pits to BRE 365 Contamination/Pollution check Groundwater Monitoring 			✓	✓	✓
Detailed Drainage Scheme Plan	Dimensioned plan showing main aspects of the drainage infrastructure. Plans should ref:- <ul style="list-style-type: none"> SuDS details (size/volume) Pipe Numbers/Sizes/Levels Outfall & Permitted Discharge (if applicable) 			✓	✓	✓
Detailed SuDS Drawings (Open SuDS)	Dimensioned plans of proposed SuDS components i.e. scaled cross sections/long sections			✓	✓	✓
Full hydraulic calculations (MicroDrainage “Network” output)	At this stage, SCC require simulations of the drainage network inc SuDS components. MicroDrainage Network should be submitted for 1,30 and 100yr+CC storms. (Source Control files are useful but not enough on their own)			✓	✓	✓
Discharge Agreements	Evidence of any permissions or permits being obtained.			✓	✓	✓
Health and Safety Risk Assessment	Where deep open SuDS (water level >0.5m) are proposed a H&S file will be required.					✓
Surface Water Construction Plan	Plan of how surface water runoff is to be attenuated and treated during the construction phase. Including plans of any temporary drainage.					✓

6.4 Due to the number of potential crossings of ordinary watercourses, we'd expect a full list of any crossing points and whether these are permanent or temporary crossings. These crossing points may require written consent under the Land Drainage Act, as amended by the Flood and Water Management Act 2010.

Key Points

- Cable or pylons shall not be laid through a watercourse without written Land Drainage Act consent.
- Direct drilling will not require Land Drainage Act consent if cables are laid below the bed of the watercourse.
- Cables laid below an ordinary watercourse shall be at least 1m below bed depth.
- Single span bridges are preferred to culverts
- Any culverts (temporary or permanent) in the ordinary watercourse will require Land Drainage Act consent.

Useful Links

- [Land Drainage Act consent, SCC LLFA](#)
- [Guidance on development and flood risk, SCC LLFA](#)

7. SCC Highways

Overall project

- 7.1 SCC recognises that the major impact of the scheme in terms of transport will be during construction and removal at the conclusion of the project. Limited movements will be generated during operation, and these will be concentrated at the substation sites.

Route selection

- 7.2 The information provided on route option selection [download \(nationalgrid.com\)](https://www.nationalgrid.com) does not specifically consider transport, for example ease of access for construction vehicles and workers. PRow is split between two disciplines, social / economic and landscape ignoring their function as highways.

Assessment of transport impact

- 7.3 A number of assessment methods are available to assess transport impacts of projects. Although no information is provided on the applicants preferred method of assessment SCC would place it on record that use of DMRB LA112 without modification is considered as being suitable for highways schemes and not other linear schemes such as this. The timing and nature of impacts for a transmission scheme are different to a new highway.
- 7.4 NPS1 (5.13.1) states that applicants should consult the Highways Agency and Highways Authorities as appropriate on the assessment and mitigation.

Public rights of way

- 7.5 Public Rights of Way should be dealt with as a single topic area not split between landscape, social economic – refer to separate PRow comments

Cumulative and aggregated impact

- 7.6 NGET will need to consider the cumulative and aggregate impact with the Bramford to Twinstead proposals and other NSIPs. This is particularly important with regard to PRow around Bramford, and the aggregate impact on amenity value of PRow and highways, in terms of the global impact of all NSIPs, other non-NSIP schemes e.g. solar farms and, generally, the repeated occurrence of construction projects in limited geographical area. – impact of other non NSIP schemes e.g. solar farms.

Strategic networks

AIL movements

- 7.7 Whilst the substation at Bramford is connected to the M25 by a DfT preferred heavy load route (HR82) this road-based approach is no longer valid. The route predates NPS1 EN-1 which clearly states that 'water-borne or rail transport is preferred over road transport at all stages of the project, where cost-effective'. SCC have been advised by National Highways that structures on the A12 south of Ipswich are no longer cleared for special order movements

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/360533/High and Heavy Load Grids Map for Abnormal Loads.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/360533/High_and_Heavy_Load_Grids_Map_for_Abnormal_Loads.pdf)

Cables

7.8 SCC is aware that cable for transmission projects is moved in loads falling in the STGO category. Thus, these too should fall under the preference for water borne transport and should be delivered to the nearest feasible port.

Strategic Road Network (SRN)

7.9 The SRN is the responsibility of National Highways. However, as the local highway authority SCC expresses concerns regarding the sub-standard nature of many of the junctions on the A12 between Colchester and Ipswich.

- A12/B1029 Stratford St Mary
- A12/B1068 Higham
- A12/B1070 East Bergholt
- A12 junctions with Wenham Lane, Pound Lane south of Capel St Mary
- A12 NB off slip into Capel St Mary

7.10 These junctions do not comply with modern design standards and the short acceleration and deceleration lanes are considered to be a road safety issue. This would be exacerbated by additional construction vehicles, particularly HGVs.

7.11 Congestion is experienced at the A12/A14 Copdock Interchange which aggravates safety issues on the A12 northbound. Of concern to the LHA is that this congestion results in traffic diverting off the A12 to 'rat run' through local communities such as Copdock and Washbrook. National Highways have included this junction within the Road Investment Scheme 3 (RIS3) which may be delivered between 2024 and 2030 but neither delivery nor the timing are confirmed.

7.12 Other junctions of concern on the A14 are:

- junction 51 A14/A140 Beacon Hill and
- junction 52 A14 Claydon

7.13 It is acknowledged that the choice of the transmission route within the area of consideration is unlikely to alter the above.

Regional networks

7.14 To access the transmission corridor, it is presumed that workers and construction traffic use major access routes such as A140, A143 and A1071.

A140 (A14 to Scole)

7.15 Due to the number of crashes on this route a maximum speed limit of 50mph was placed on the road in Suffolk. Generally, this has stabilised the number of crashes but the impacts of addition traffic resulting from the East Anglia Green project and its impact on road safety will need to be considered. As it is

heavily trafficked the A140 severs some communities such as Little Stonham and Brockford Street. SCC would be concerned about the impact of additional traffic at a number of junctions.

- B1078, Coddendam
- All Saints Road, Creeting St Mary
- A1120, Earl Stonham
- Stoke Road (White Horse) Crossroads, Stoke Ash

A143 (Bury St Edmunds to Scole)

7.16 This route has seen improvements in parts with a number of bypasses completed in the 1980's and 1990's. However, sections remain, including junctions that have not been improved to modern standards of design. Known issues on the A143 are:

- Bunbury Arms junction, Great Barton. Capacity and Road safety. Note that developer funded improvements scheme is due at this location.
- Air Quality Management Area at Great Barton (West Suffolk)

A1071 (Ipswich to A34 Sudbury)

7.17 A1071 varies from recent construction (Hadleigh Bypass) to narrow twisting evolved sections such as either side of Hintlesham. Some lengths have a poor safety record and there is a notable narrow pinch point south of Burstall Bridge where it is not possible for two HGVs to pass. Key issues on the A1071 are:

- B1113 Beagle Roundabout, Sproughton (capacity / road safety)
- Junction with Burstall Lane (road safety)
- Narrow road and Burstall Bridge (road layout / width)
- Hintlesham (severance, fear and anxiety)
- Bends west of Hintlesham (road layout, safety)
- A1141 and Aldham Mill Hill junctions on Hadleigh Bypass (road safety)
- A134/A1071 junction at Newton (road safety)

Other issues related to the regional network

7.18 The rail line between Ipswich and Norwich acts as a barrier to movement north of the A14. There are a number of narrow or low bridges (e.g. Bacton, Needham Market) and level crossings (e.g. Mellis). This is of concern where the transmission route lies west of the rail line making access from the A140 more difficult. This may be why the existing transmission line is between the Norwich rail line and the A140.

7.19 The combination of the A14, rail line and River Gipping creates a barrier to access between Needham Market and Bramford substation channelling local traffic through Claydon. Needham Market or Stowmarket.

- 7.20 The River Stour also acts as barrier although in this case the impacts are limited due to the proximity of the proposed route to the A12.
- 7.21 The Suffolk Lorry Route Network <https://www.suffolk.gov.uk/assets/Roads-and-transport/lorry-management/Lorry-Route-Map-Amended-MAY-17.pdf> shows the preferred hierarchy of routes that may be suitable for HGVs. It is under review. Whilst a number of B class roads (B1078, B1113) are shown as local access routes these are only for access to specific locations and not as a route for significant numbers of construction vehicles. Nor should such routes be presumed to be suitable for movement of heavy loads.

Local issues

- 7.22 The majority of Suffolk's minor B, C and unclassified roads are narrow, bendy and unsuitable for HGVs or significant numbers of light traffic. Examples are:
- B1068 between Stoke by Nayland and Thorington Street (pinch point where 2 cars struggle to pass)
 - B1113 Sproughton, B1068 Stoke by Nayland, B1070 Benton Street Hadleigh, Stone Steet Boxford (narrow streets through historic communities)
- 7.23 Generally local roads in Suffolk have evolved rather than being designed and as a consequence are often have thin construction. Combined with narrow roads this often results in rapid edge deterioration and verge erosion. Proximity of ditches, trees and hedges also restricts movement and creates engineering difficulties when maintaining or improving highways.
- 7.24 Selection of the preferred transmission route will have a significant influence on which local roads will be used for local access or where haul roads are required to avoid specific problem areas.

National Cycle Routes

- 7.25 Several National Cycle Routes cross the proposed route
- Cycle Route 1 between Capel St Mary and Washbrook.
 - Cycle Route 51 follows the B1113 south of the River Gipping
 - Cycle Route 30 follows the Norwich Rail line north from Yaxley to south of Diss and then west towards Redgrave

https://www.sustrans.org.uk/national-cycle-network/?gclid=EAlalQobChMIovndsuXm9wIVAevtCh0eNQAsEAAYASABEgJhRPD_BwE

Environmental

- 7.26 It is likely that a large number of accesses will be required to the transmission corridor from the public highway, or alternatively significant lengths of temporary haul road will be required. Both will have local environmental impacts, the removal of hedges or trees to create safe accesses or vehicle movements to construct and remove temporary haul routes.

- 7.27 However, post construction mitigation along the route, for example when reinstating land used for access, can be identified as a contribution to environmental and biodiversity net gain as it allows excellent opportunities to reconnect important habitats via green corridors, biodiversity stepping zones, and reestablishment of appropriate hedgerows; and/or connect people to the environment, for instance via footpaths and cycleways constructed in tandem with biodiversity enhancements (Draft EN-5 2.8.1).

[EN-5 Electricity Networks National Policy Statement - final word version \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/612212/en-5_electricity_networks_national_policy_statement_-_final_word_version.pdf)

Workers movements

- 7.28 It is presumed that as the construction will be of limited duration the workforce will be largely transient. As accommodation is limited within the area and the project covers a significant length this will result in workers travelling form distance to the site. Whilst access by sustainable transport in a generally rural location will be limited SCC would support any measures that could reduce workers trips such a car share, park and ride sites or pick up busses. A Workers Transport Plan with appropriate monitoring and controls would be required.
- 7.29 SCC notes that the assessment of transport impacts relies heavily on gravity models for workforce distribution. At this time here are a number of inherent weaknesses in data use in such models such as the age of the data (i.e., 2011 census data). With the scale of development in the region it is likely that the availability of permanent or transient workers and accommodation to house them will be in high demand and assumptions made in the past regarding proximity of workers to sites may no longer be valid.

Construction traffic movements

- 7.30 Little detail is provided in the consultation to inform a response on the impacts of construction traffic. Other than the general and location specific information about the local highway network provided above SCC would expect that any assumptions made within transport models is robust and backed by acceptable monitoring and control measures. This is critical where embedded mitigation relies of fixed shift patterns or a presumed hourly distribution of deliveries.

Mitigation

- 7.31 NPS1 (5.13.1) states that applicants should consult Highway Authorities as appropriate on the assessment and mitigation. The information provided in the consultation does provide sufficient details to assess the impacts of East Anglia Green in isolation or in combination with other infrastructure projects. SCC considers that potential mitigation may include:

Road safety and / or capacity improvements

- A12 slip roads
- A140 junctions such as at Coddendam(B1078), Stoke Ash, A1120 Stonham

- A1071 between Ipswich and the A134
- As yet unidentified improvements on B, C and unclassified roads.

Serviceability / access improvements

- Passing places minor roads
- Widening of local highways
- Strengthening of carriageways
- Additional maintenance to repair deterioration of local roads due to construction traffic

Non-motorised users

7.32 The applicant should also provide details of proposed measures to improve access by public transport, walking and cycling, to reduce the need for parking associated with the proposal and to mitigate transport impacts. (NPS 5.13.4)

- Improvements to footways, cycleways and crossing points to reduce fear and anxiety for non-motorised users
- Alleviation of severance within communities due to additional construction and worker movements.

Controls, monitoring and enforcement

7.33 It is expected that the following will need to be developed in conjunction with SCC as part of these proposals:

- Construction Management Plans;
- Travel Plans
- Protection of Highway Rights and recovery of Costs.

Requirements

7.34 If decommissioning of the project is excluded from environmental assessments, it is recommended that a requirement be included to ensure this is assessed when it becomes necessary.

8. EPS Historic Environment

- 8.1 EAG is a proposal by National Grid Electricity Transmission (National Grid) to reinforce the high voltage power network in East Anglia, in order to meet future energy transmission demands. The proposals relate to several districts between South Norfolk and Tilbury, Essex.
- 8.2 Whilst the following Built Heritage Advice relates solely to the proposals which fall within the county of Suffolk, the scheme should be considered holistically when developing the proposals to ensure a high-quality project which is sympathetic to the historic built environment. The following advice is designed to inform the next steps in developing the proposals including the preparation of an Environmental Impact Assessment (EIA), and statutory consultations.
- 8.3 The EIA should include a Heritage Desk-Based Assessment (DBA), the objective of which is to identify all heritage assets which have the potential to be impacted by the proposals and which should therefore be taken forward for further assessment. A methodology for this should be provided and it is recommended that this is informed by Historic Environment Good Practice Advice in Planning Note 12: Statements of Heritage Significance and Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (Second Edition), which provides for a staged approach to proportionate decision-taking as follows:
- Step 1: Identify which heritage assets and their settings are affected
- Step 2: Assess the degree to which these settings and views make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated
- Step 3: Assess the effects of the proposed development, whether beneficial or harmful, on the significance or on the ability to appreciate it
- Step 4: Explore ways to maximise enhancement and avoid or minimise harm
- Step 5: Make and document the decision and monitor outcomes
- 8.4 In identifying which heritage assets and their settings may be affected (Step 1) it is recommended, given the scale and nature of the proposals, that a study area of 5km from the graduated swathe boundary is adopted. All heritage assets within this study area including Listed Buildings, Scheduled Monuments, Conservation Areas, Registered Parks and Gardens, and non-designated heritage assets should be identified.
- 8.5 The National Planning Policy Framework notes that the extent of a heritage asset's setting is not fixed and may change as the asset and its surroundings evolve. As such, heritage assets that are landmark buildings or buildings located on a higher topography may be situated outside of the study area but

still require assessment. Therefore, it is recommended that a Zone of Theoretical Visibility (ZTV) is established. A ZTV overlaid with a Designations Map showing the location of all Listed Buildings, Scheduled Monuments, Conservation Areas, Registered Parks and Gardens, and non-designated heritage assets would be considered valuable in identifying those heritage assets which should be taken forward for further assessment.

- 8.6 Should it be determined that a heritage asset should be scoped out and not taken forward for further assessment, a clear and convincing justification for this should be provided.
- 8.7 Once all of the identified heritage assets which have the potential to be impacted by the proposals have been identified, the degree to which their settings and views make a contribution to the significance of the heritage assets or allow their significance to be appreciated, should be assessed (Step 2). This should seek to establish a heritage baseline for each asset.
- 8.8 The DBA should seek to demonstrate a sound understanding of historic use/land use and ownership, and identify which farm(s)/field(s) the heritage assets were historically and/or functionally associated with, in order to fully assess the impact of the proposals on the historic, architectural, and associative value of the heritage assets.
- 8.9 Furthermore, the views from and to each heritage asset should be carefully considered. The following would be considered valuable in establishing a heritage baseline:
- A ZTV overlaid with a Designations Map and a Viewpoint Location Plan, naming all Listed Buildings, Scheduled Monuments, Conservation Areas, Registered Parks and Gardens, and non-designated heritage assets
- 8.10 The methodology for the views and visual representations should be in accordance with the Guidelines for Landscape and Visual Impact Assessment (GLVIA3) and guidance notes provided by the Landscape Institute. It is further recommended that views be undertaken during winter months at a minimum, to reflect and consider the 'worst case scenario.' All viewpoints should be consulted and agreed.
- 8.11 The following publications and advice notes from Historic England are also useful guidance:
- Historic Environment Good Practice Advice in Planning 2: Managing Significance in Decision- Taking in the Historic Environment
 - Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (Second Edition)
 - Historic England Advice Note 7: Local Heritage Listing – Identifying and Conserving Local Heritage (Second Edition)
 - Historic England Advice Note 10: Listed Buildings and Curtilage
 - Historic Environment Good Practice Advice in Planning Note 12: Statements of Heritage

Significance

- 8.12 Any heritage assets which are identified as being potentially impacted by the proposals should be taken forward for further assessment during which the effects of the proposed development, whether beneficial or harmful, on the significance of the heritage asset or on the ability to appreciate it, should be assessed (Step 3).
- 8.13 The third stage of any analysis is to identify the effects a development project may have on settings and to evaluate the resultant degree of harm or benefit to the significance of the heritage assets. Again, the guidance provided in Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (Second Edition) should inform the methodology for analysis.
- 8.14 Given the scale and nature of the proposals, it is recommended that the evaluation extend to include an assessment of cumulative impacts which may arise from other large-scale developments or similar schemes. Furthermore, complex impacts arising from the development which may not be solely visual should also be assessed.
- 8.15 Once the extent to which heritage assets are impacted by the proposals, through change within their setting, is fully understood, ways to maximise enhancement and avoid or minimise harm should be explored (Step 4). There may be design amendments which could mitigate any identified harm, and these should be carefully considered.
- 8.16 Should the proposals result in residual 'less than substantial' harm, despite mitigation efforts, then paragraph 202 of the NPPF would be a relevant consideration and the Local Planning Authority is required to make a balanced judgement between the level of harm and the public benefits.
- 8.17 Paragraph 199 should also be considered as this gives great weight to the conservation of heritage assets, as well as the statutory duty of Section 66 and 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990 under which local planning authorities should have special regard to the desirability of preserving the settings of listed buildings and the character and appearance conservation areas.
- 8.18 It is recommended that further pre-application discussions are sought after the heritage assessment is completed.

9. EPS Landscape

Corridor and Preliminary Routeing and Siting Study Report

- 9.1 East Anglia GREEN is a proposal by National Grid Electricity Transmission (National Grid) to reinforce the high voltage power network in East Anglia, in order to meet future energy transmission demands. The proposals relate to several districts between South Norfolk and Tilbury, Essex.
- 9.2 Whilst the following Landscape Advice relates solely to the proposals which fall within the county of Suffolk, the scheme should be considered holistically when developing the proposals to ensure a high-quality project which is sympathetic to the natural environment. The following advice is designed to inform the next steps in developing the proposals including the preparation of an Environmental Impact Assessment (EIA).
- Current route and design
- 9.3 We have reviewed the Corridor and Preliminary Routeing and Siting Study Report and appendices as well as the Public Consultation Strategy (all National Grid, April 2022). This provides comments on the North East Anglia connection (Norwich to Bramford) and the South East Anglia connection (Bramford to Tilbury). We also note the references to the Overarching National Policy Statement for Energy – EN1 and EN5, which includes landscape and visual factors.
- 9.4 We note that the routeing constraints in Tables 3.1 and substation siting constraints only refer to nationally designated sites and residential properties. However, we recommend that locally designated sites and similar e.g. Special Landscape Areas are also included as mapped landscape and visual constraints. It would also be beneficial for valued landscape qualities for landscape character areas to be analysed as these would be particularly useful in ensuring landscapes outside of designations are appropriately reviewed and impacts minimised as far as practicably possible by routeing revisions, design optioneering and mitigation measures.
- 9.5 Para 3.2.10 states that the potential to route parallel in close proximity to existing 400kV overhead lines is a principal opportunity and would restrict the geographic extent of environmental effects associated with such infrastructure. Earlier indications of the proposed power line corridor showed this was the case, however, under the new proposals, a large section of the new overhead lines will be over 4km west of the existing line, introducing landscape visual impacts in areas where the baseline landscape has not yet been affected by electricity infrastructure. We note that the Holford and Horlock rules have been used as a guide to routeing and siting of new infrastructure, however we would advise further details on the existing constraints are provided to justify the new routeing proposals.
- 9.6 The location of Cable Sealing End (CSE) compounds and proposed substations must not only be carefully considered in terms of impacts on visual amenity and landscape character, but also in regard to the setting of the

AONB. The Dedham Vale AONB Position Statement (revised Nov 2016) states that “The setting of the Dedham Vale AONB does not have a geographical border. The location, scale, materials or design of a proposed development or land management activity will determine whether it affects the natural beauty and special qualities of the AONB. A very large development may have an impact even if some considerable distance from the AONB boundary.” and “Adverse impacts might not be visual. The special qualities of the Dedham Vale AONB include tranquillity. A development which is noisy may well impact adversely on tranquillity even if not visible from the AONB.” It is therefore considered that different locations of CSE compounds at extended distances from the AONB are explored to fully understand impacts on setting and natural beauty.

- 9.7 We also highlight that any undergrounding in visually sensitive areas such as AONBs, may result in increased landscape impacts from trenching and construction of Cable Sealing End (CSE) compounds and we would expect a full audit of the landscape features and habitats on site to be undertaken to inform the alignment and mitigation proposals.
- 9.8 The National Grid’s Landscape Enhancement Initiative, which is part of the Visual Impact Provision project, is very much relevant to the AONB area. However, we would advise a similar framework approach is applied to the project as a whole given the evidence available that demonstrates the overall sensitivity of the landscape. Therefore, the extant and rationale for offsite planting and landscape improvement works should align with this initiative.
- 9.9 To help reduce adverse landscape and adverse impacts along the proposed route, we would recommend that strategic opportunities are taken to rationalise and upgrade/remove the existing 132kv lines where possible.

Norwich to Bramford – Sections C-E

- 9.10 As noted in Recommendation no.1, other landscapes outside of nationally designated landscapes should be appropriately analysed and the route designed accordingly. The Draft NPS EN-1 (Para 2.11.20) states “The Secretary of State should also have special regard to nationally designated landscapes, where the general presumption in favour of overhead lines should be inverted to favour undergrounding. Away from these protected landscapes, and where there is a high potential for widespread and significant landscape and/or visual impacts, the Secretary of State should also consider whether undergrounding may be appropriate, now on a case-by-case basis, weighing the considerations outlined above.”
- 9.11 Therefore, we would advise on the basis of their intrinsic landscape quality that a detailed assessment of other valued landscapes such as the Waveney Valley and Gipping Valley are undertaken and in turn National Grid considers additional undergrounding in these areas.

Bramford to East Anglia Connection (EAC)

- 9.12 Though it sits outside the Suffolk authoritative boundary, the landscape south of the AONB contributes towards its setting and therefore careful consideration for the route and design need to be taken. We note that the

landscape around Lawford and the proposed substation location is an open and exposed plateau with a low density and rural settlement pattern, therefore any changes to the skyline in the form of multiple pylons may have detrimental impacts on both character and visual amenity. Currently the proposed routes to and from the EAC are proposed as overhead pylons, however given the pylons will be seen in combination, the potential impacts could be significant. For this reason, we would recommend National Grid explore options to continue the proposed undergrounding through the AONB, to the EAC.

- 9.13 The landscape response to cumulative impacts at and around the Bramford Sub-station needs to be carefully considered. Currently there is a number of live and upcoming applications in and around the Bramford area of an industrial character, that will have a detrimental impact on the landscape and Bramford as a settlement. Mitigation measures such as the reinforcement of historic field boundaries, restoring and planting hedgerows, as well as increasing the stock of hedgerow trees are important measures to consider on site.
- 9.14 We would expect preliminary consultations on other national grid schemes to be provided at the earliest opportunity to allow us to understand the cumulative impacts and assess whether there are opportunities for cumulative mitigation measures both on and off site.

Next Steps

- 9.15 The National Planning Statement (NPS) EN-1 Section 5.9 also sets out recommendations and requirements in relation to landscape and visual impact. These are detailed below in italics:

“The landscape and visual assessment should include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project. The applicant’s assessment should also take account of any relevant policies based on these assessments in local development documents in England” (Para 5.9.5).

- 9.16 In Suffolk, the primary source of information for the landscape baseline is the Suffolk Landscape Character Assessment, which has informed the district level BMSDC Landscape Guidance (2015) and the Managing a Masterpiece LCA.
- 9.17 On this basis it is recommended that the Suffolk LCA provides the overarching framework for the baseline study, with further reference to the BMSDC Guidance and Managing a Masterpiece Study for localised details on local character and cultural heritage within the AONB and the Stour Valley project area.
- 9.18 *“The applicant’s assessment should include the effects during construction of the project and the effects of the completed development and its operation on landscape components and landscape character” (Para 5.9.6).*
- 9.19 GLVIA3 recognises that landscape value is not always signified by designation: ‘the fact that an area of landscape is not designated either

nationally or locally does not mean that it does not have any value' (paragraph 5.26).

- 9.20 In determining landscape value, TGN 02-21 'Assessing the Value of Landscapes Outside National Designations' has recently been published and builds on the details within GLIVIA3 and the assessment of value (GLIVIA3 Box 5.1).
- 9.21 For instance, Table 1 of the TGN provides a range of factors that can be considered when identifying landscape value. This includes the incorporation of cultural associations (natural heritage and cultural heritage) into consideration of landscape value, which is greatly supported.
- 9.22 "National Parks, the Broads and AONBs have been confirmed by the Government as having the highest status of protection in relation to landscape and scenic beauty (Para 5.9)
- 9.23 ... consideration of such applications should include an assessment of:
- the need for the development, including in terms of national considerations, and the impact of consenting or not consenting it upon the local economy.
 - the cost of, and scope for, developing elsewhere outside the designated area or meeting the need for it in some other way; and
 - any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated." (Para 5.10)
- 9.24 As well as those already referred to above, it is expected that the following reference/guidance documents are considered and used as part of any future assessment. This includes:
- Dedham Vale AONB and Stour Valley Management Plan
 - Dedham Vale AONB Natural Beauty and Special Qualities and Perceived and Anticipated Risks (July 2016)
 - Managing a Masterpiece Evaluation Report (Dec 2013)
 - Valued Landscape Assessment Stour Valley Project Area (March 2020)

10. SCC Public Health – Community Wellbeing

- 10.1 SCC recommends to undertake an appropriate assessment of possible impacts on health for those who are to be living in proximity to overhead line and cables and main findings are shared and provide an assurance to mitigate all risks. Some people may question about the depths of cables to be installed and all parameters are shared with local population and those whose health and wellbeing might be impacted. Otherwise this could cause anxiety and unnecessary worry among public.
- 10.2 The whole project will take years and will use large scale of land which could cause noise, dust, and cause inconvenience to their everyday life. For example, people may have a limited access to green spaces, public rights way, thus this could impact people's health and wellbeing.
- 10.3 SCC considers that, notwithstanding embedded mitigation and potential modifications to the scheme as proposed above, it will be unavoidable for the development to result in residual impacts on the community and locality, including on amenity, loss/reduced quality of recreational opportunity for the community, culture and heritage, and health and wellbeing. SCC expects appropriate and robust mitigation for such residual impacts, which could be, for example, include funding for alternative outdoor recreational offers, access and amenity improvements, cultural and heritage enhancements.
- 10.4 NPPF requires local planning authorities to work with public health, health organisations and other authorities to:
- take account of the health status and needs of the local population including expected future changes
 - consider any information about the barriers to improving health and wellbeing
 - support safe, secure, and healthy communities with local services by active sustainable travel
 - promote good design of development, open space and green links
 - taking account of local health strategies etc.

While for NSIPs, the NPPF does not directly apply, these principles should be considered in the context of this application.

11. SCC Public Rights of Way

- 11.1 The proposed new pylon route significantly affects the public rights of way network during the construction phase. Due to this SCC strongly advocates that this is dealt with within its own chapter and not dealt solely within elements of Landscape and Socio-economic chapters.
- 11.2 SCC has concerns about the impact of multiple National Grid projects particularly within the Bramford area and the long-term impact on restrictions on the rights of way network. The combination of projects could see closures for significant lengths of time effectively severing the network and creating long term disruption to PRow users. Although the closures are not permanent, this will impact on access and thus on the health and well-being of the local community over a lengthy period. SCC considers that appropriate mitigation for these residual impacts is required.
- 11.3 Several promoted long-distance routes will be affected by the proposal covering the Stour Valley Path, Gipping Valley Footpath and Mid Suffolk Footpath and connecting promoted circular routes, in addition to local strategic routes close to villages. These routes need to be monitored during construction of the line and usage of haul roads, to identify impacts and where required further mitigate. This should also cover the increase in construction traffic on minor routes close to villages that are also used for non-motorised access to the PRow network. SCC are happy to provide details of specific areas of known medium to high use that should be included in further surveying.
- 11.4 SCC also expects mitigation measures for the impact on the popular sections of the rights of way to offset the disruption to local communities. Consideration needs to be given to whether temporary infrastructure can assist as legacy for PRow access as a permanent measure once completion of the scheme, including any proposed structures. Further discussion would be welcomed on this.
- 11.5 Further details would be welcomed on treatment of routes and proposals for closures.
- 11.6 Additional general comments as follows:
- A pre and post condition survey must be carried out including identification and assessment of surface condition and with a scope of coverage and methodology to be agreed with SCC as Highway Authority. This should include pre-construction work where PRow might be used to gain access to the corridor and reinforcement works might be required prior to use by vehicles.
 - Where impacted by the works, any PRow will be restored to original condition or to a condition agreed with SCC - where there are existing defects, the applicant should agree restoration measures with the SCC, and this should be included within a Code of Construction Practise.
 - Where PRow cross the cable corridor, haul road, access tracks and other sites, the surface must be kept in a safe and fit condition at all times for all

users. Management measures should be included within the Construction Traffic Management Plan

- Pre-construction works must not obstruct or disturb any public rights of way (e.g. newt fencing, archaeology surveys etc) unless otherwise agreed with SCC. Management measures should be discussed, and any temporary closures will need to be included in the DCO.
- Public rights of way that are used for any stage of construction access should remain open, safe, and fit for the public to use at all times with management measures put in place with the agreement of SCC.
- Any temporary closure of a PRow must be agreed with SCC and the duration kept to the minimum necessary, this must be included within the DCO.
- An alternative route must be provided for any public right of way that is to be temporarily closed prior to closure. The location of alternative routes to be agreed with SCC.
- Any alternative route must be safe and fit for the public to use at all times – suitable surface, gradient and distance with no additional road walking between the natural destination points.
- Any temporary closure and alternative route will be advertised in advance on site and in the local media, and to the local parish councils including a map showing the extent of the closure and alternative route. The closure and alternative should be signed accordingly.
- There should be no new gates or stiles erected on any public rights of way that are impacted by the cable corridor and any other associated site.

12. SCC Planning Authority

- 12.1 SCC is the planning authority for minerals and waste planning matters within Suffolk as well for its own development which includes schools and some highways developments.
- 12.2 The Development Plan for the area directly affected by the scheme includes the Suffolk Minerals & Waste Local Plan, a number of different Plans produced by Babergh & Mid Suffolk District Councils, as well as a Neighbourhood Plans (see Tables 1 and 2 below).
- 12.3 The main concern in terms of minerals and waste development is the safeguarding of minerals resources and development and the safeguarding of waste development.
- 12.4 The relevant Suffolk Minerals & Waste Local Plan policies are MP10 for minerals and WP18 for waste.
- 12.5 Having considered the proposals and safeguarding maps there are no impacts in respect of existing or proposed mineral or waste facilities.
- 12.6 In terms of underlying minerals resources geological mapping indicates extensive spreads of sand and gravel resources. However, in terms of the relevant importance of these resources they are considered to be at most of regional significance compared to these grid reinforcement proposals which are of national significance. In addition, significant parts of the route are within areas where in reality planning permission would not be granted because of the impact upon statutory landscape areas for example.
- 12.7 SCC will defer to Babergh & Mid Suffolk District Councils and Parish Councils to make comments in respect of their own development plans.

Table 1: Adopted Development Plans

Item	Area	Subject	Comment
1	Suffolk	Suffolk Minerals & Waste Local Plan https://www.suffolk.gov.uk/planning-waste-and-environment/minerals-and-waste-policy/	Adopted July 2020
2	BDC	Core Strategy (Part 1 of new Local Plan) https://www.babergh.gov.uk/planning/planning-policy/	Adopted February 2014
3	BDC	Local Plan	Adopted 2006 (saved)
4	East Bergholt PC	East Bergholt Neighbourhood Plan https://www.midsuffolk.gov.uk/planning/neighbourhood-planning/neighbourhood-planning-in-babergh/east-bergholt-neighbourhood-plan/	Adopted 2016 Call for sites Jan 2022
5	Elmsett PC	Elmsett Neighbourhood Plan https://www.midsuffolk.gov.uk/planning/neighbourhood-planning/neighbourhood-planning-in-babergh/elmsett-neighbourhood-plan/	Adopted Dec 2019
6	MSDC	Core Strategy https://www.midsuffolk.gov.uk/planning/planning-policy/adopted-documents/mid-suffolk-district-council/	Adopted 2008
7	MSDC	Core Strategy Focused Review	Adopted 2012
8	MSDC	Local Plan	Adopted 1998 (saved)
9	MSDC	Local Plan Alteration (affordable housing)	Adopted 2006 (saved)

10	MSDC	Stowmarket Area Action Plan	Adopted February 2013
11	Stowupland PC	Stowupland Neighbourhood Plan https://www.midsuffolk.gov.uk/planning/neighbourhood-planning/neighbourhood-planning-in-mid-suffolk/stowupland-neighbourhood-plan/	Adopted Spring 2019

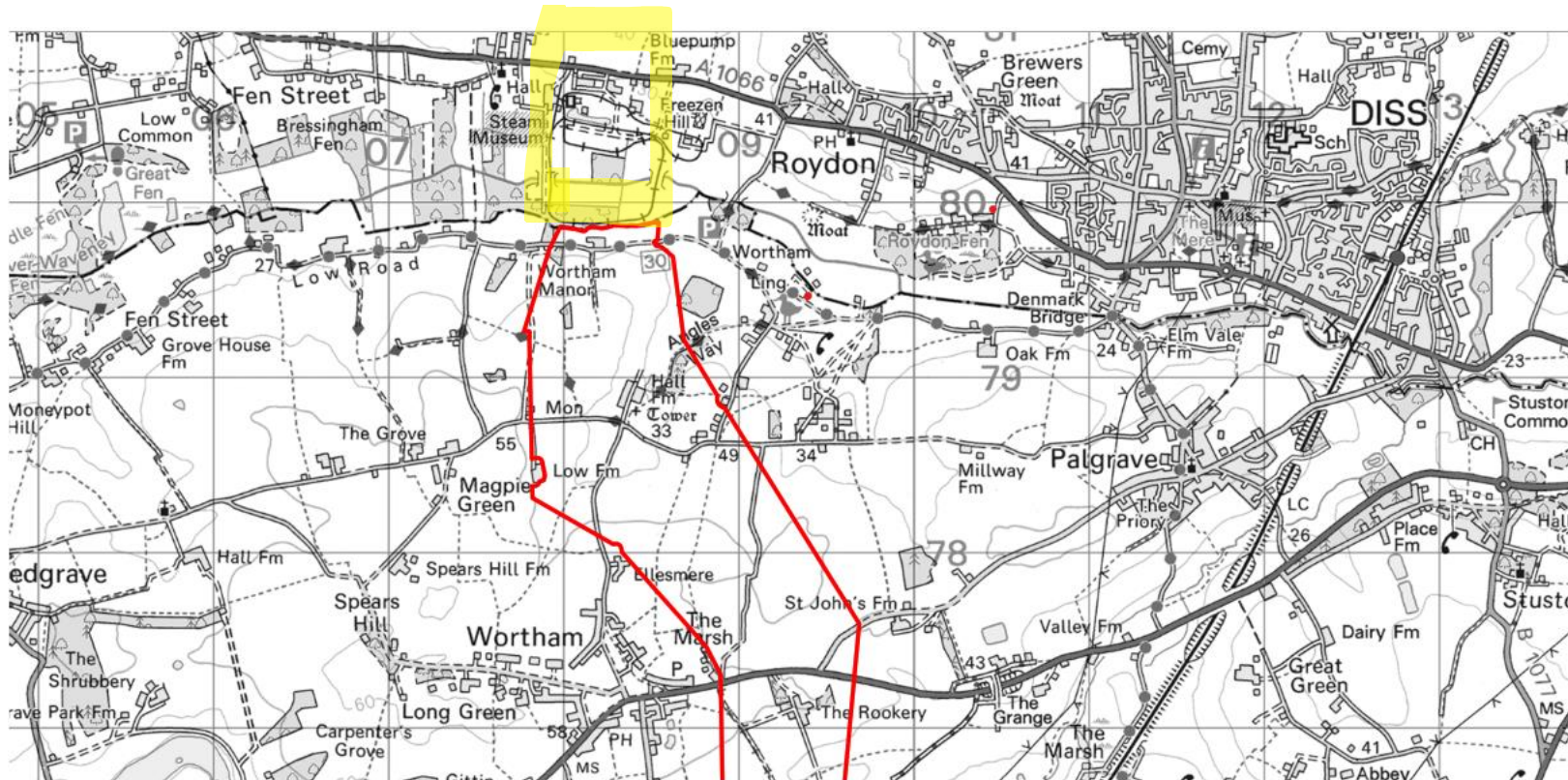
Table 2: Draft Development Plans

Item	Area	Subject	Comment
1	BMSDC	Joint Local Plan https://www.midsuffolk.gov.uk/planning/planning-policy/new-joint-local-plan/	Examination 2021-22
2	Capel St Mary PC	Capel St Mary Neighbourhood Plan https://www.midsuffolk.gov.uk/planning/neighbourhood-planning/neighbourhood-planning-in-babergh/capel-st-mary-neighbourhood-plan/	Pre-submission consultation April 2020
3	Sproughton PC	Sproughton Neighbourhood Plan https://www.midsuffolk.gov.uk/planning/neighbourhood-planning/neighbourhood-planning-in-babergh/sproughton-neighbourhood-plan/	Pre-submission consultation Nov 2021
4	Mendlesham PC	Mendlesham Neighbourhood Plan https://www.midsuffolk.gov.uk/planning/neighbourhood-planning/neighbourhood-planning-in-mid-suffolk/mendlesham-neighbourhood-plan/	Examination May 2022
5	Diss & District	Diss & District Neighbourhood Plan https://www.midsuffolk.gov.uk/planning/neighbourhood-planning/neighbourhood-planning-in-mid-suffolk/diss-and-district-neighbourhood-plan/	Major Mods May 2022
6	Old Newton D&G PC	Old Newton Dagworth with Gipping Neighbourhood Plan	In preparation May 2022

		https://www.midsuffolk.gov.uk/planning/neighbourhood-planning/neighbourhood-planning-in-mid-suffolk/old-newton-with-dagworth-and-gipping-neighbourhood-plan/	
7	Battisford PC	Battisford Neighbourhood Plan https://www.midsuffolk.gov.uk/planning/neighbourhood-planning/neighbourhood-planning-in-mid-suffolk/battisford-neighbourhood-plan/	On hold May 2022

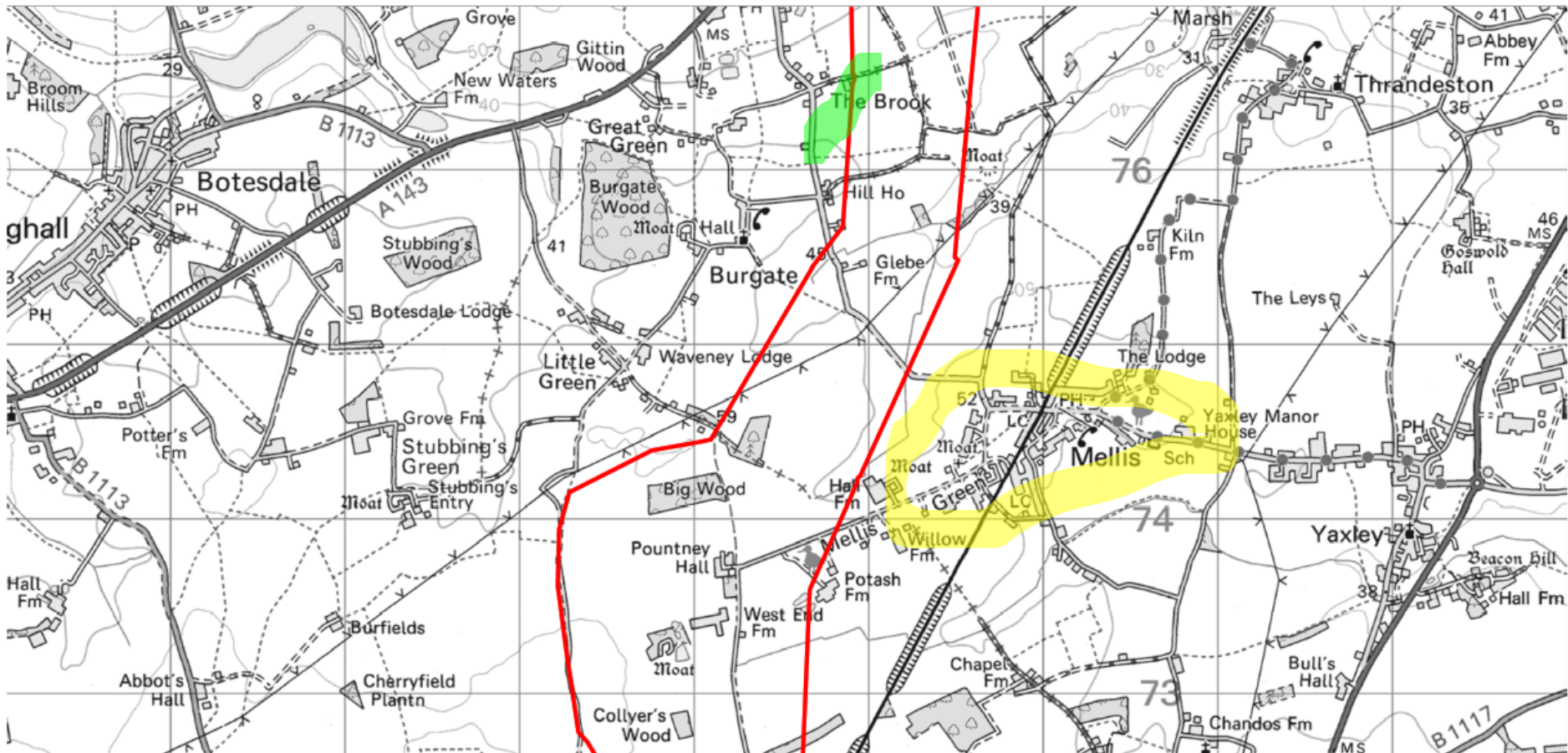
13. Maps

Map 1: Wortham



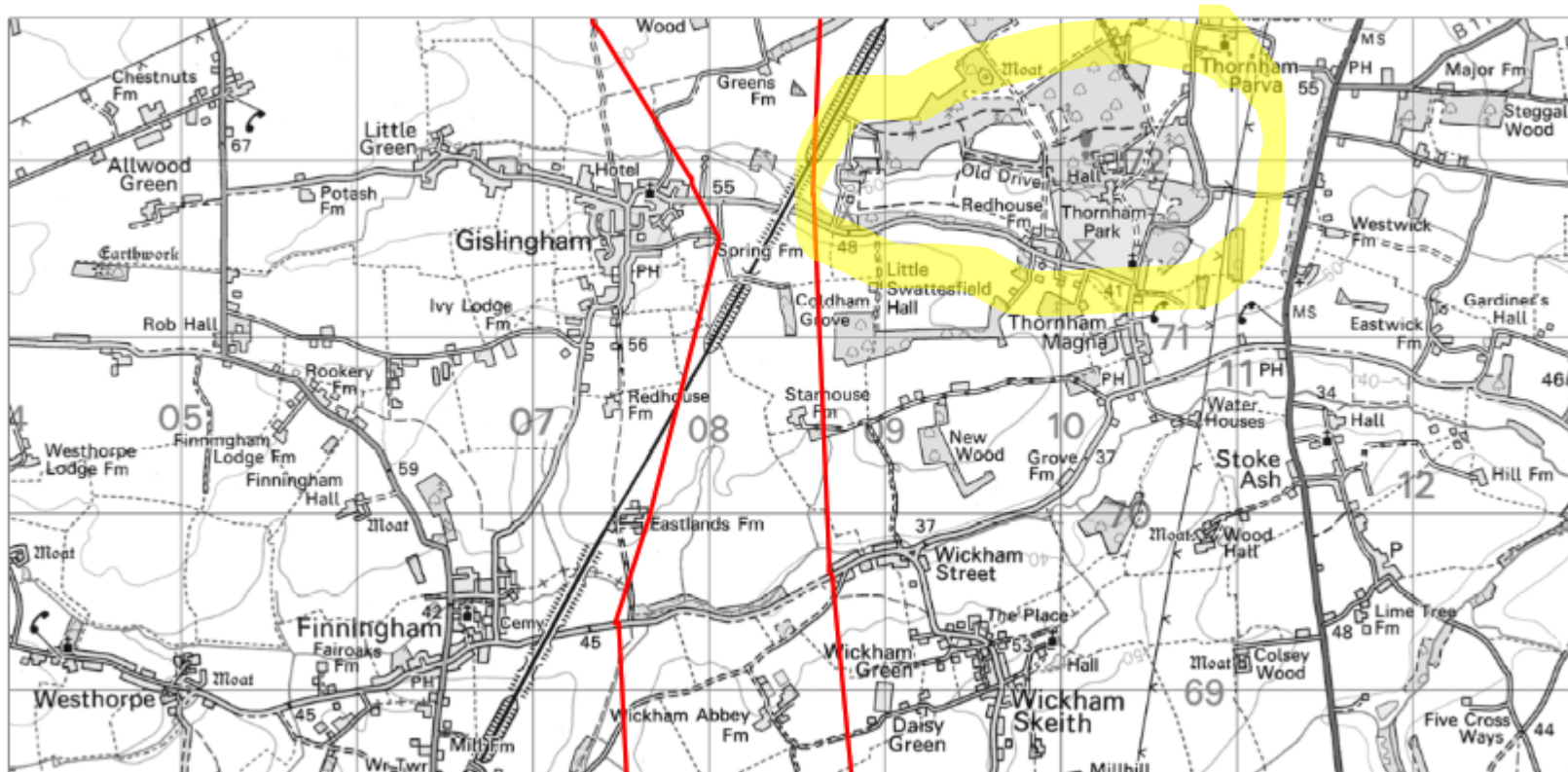
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Map 2: Burgate & Mellis



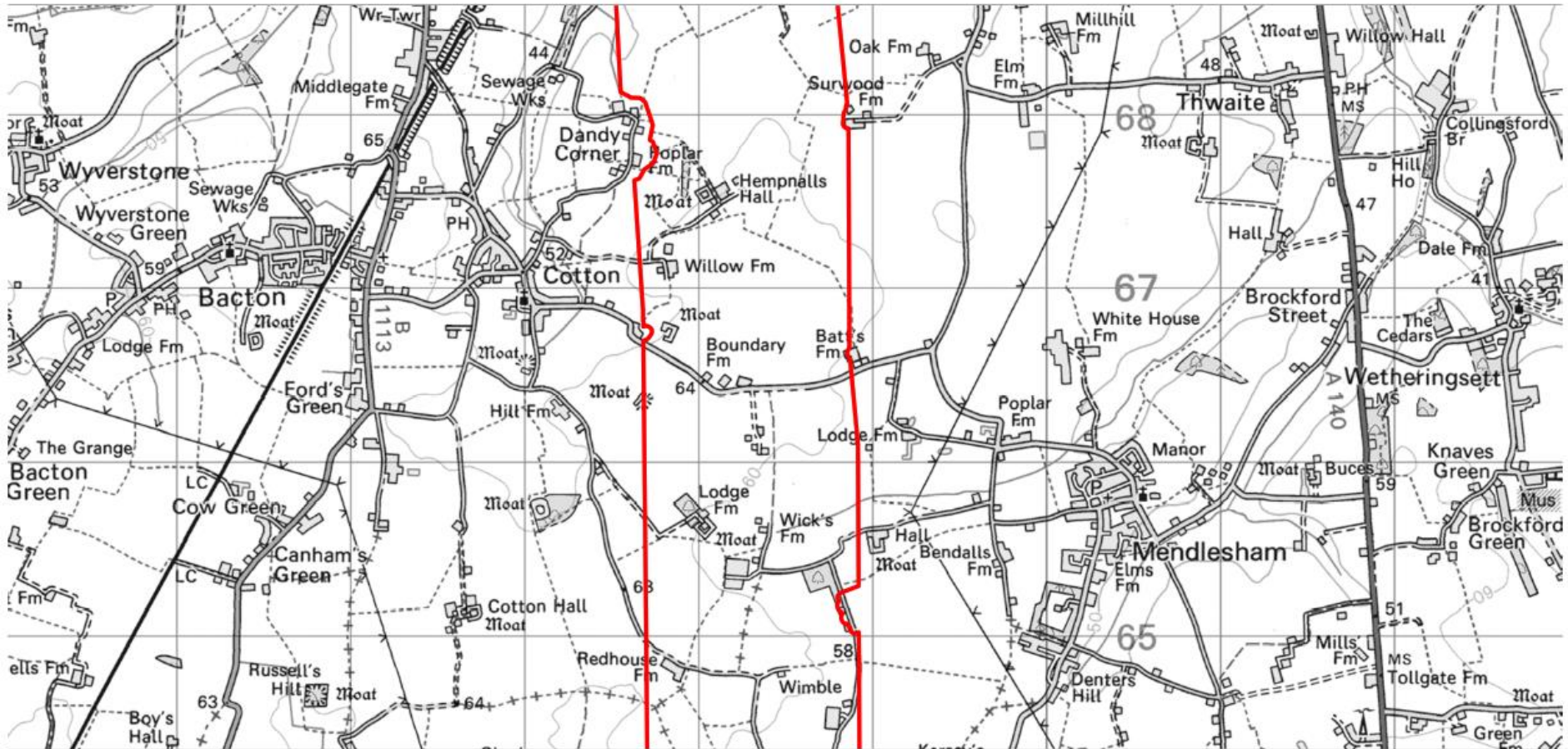
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Map 3: Gislingham, Finningham & Wickham Skeith



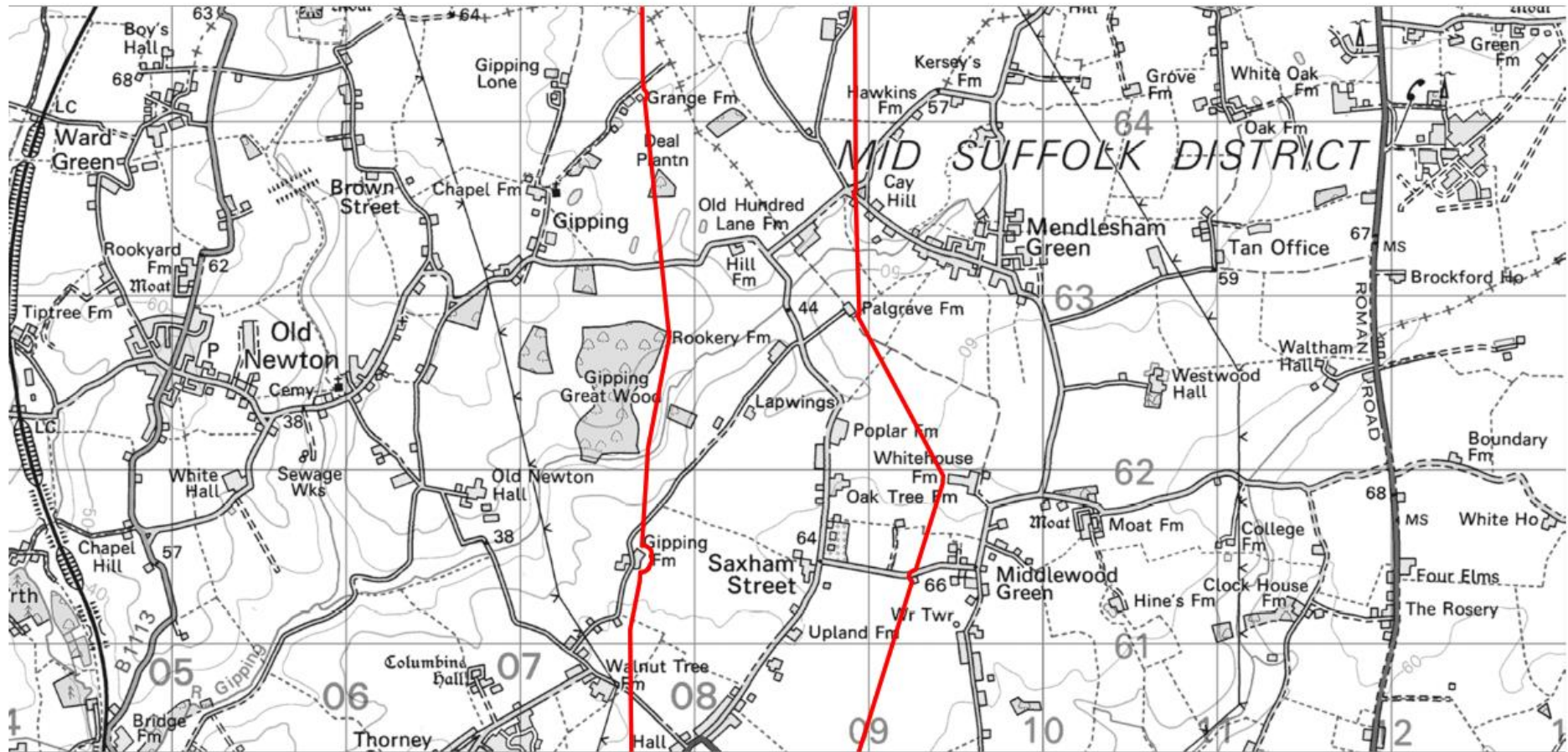
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Map 4: Cotton & Mendlesham



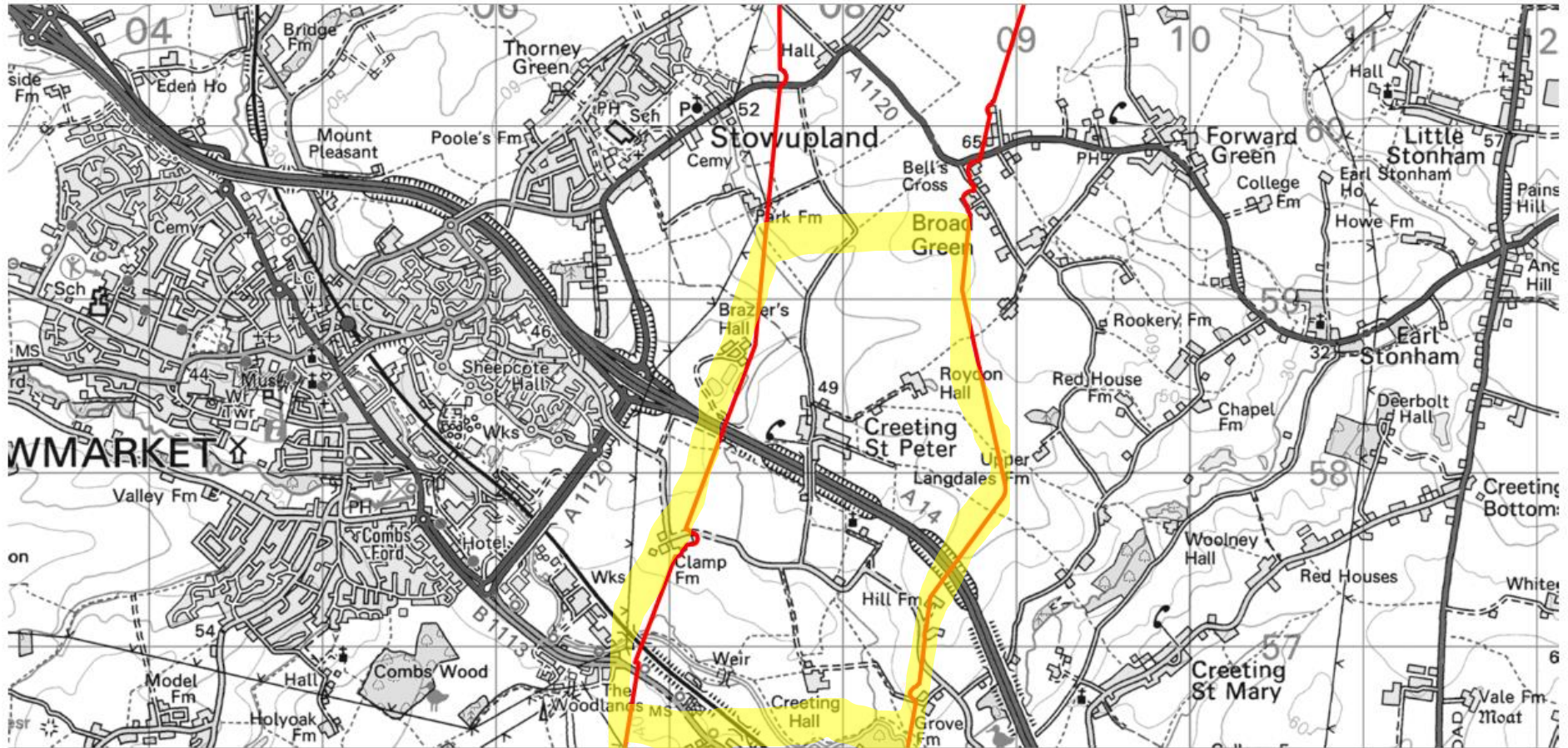
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Map 5: Mendlesham Green & Saxham Street



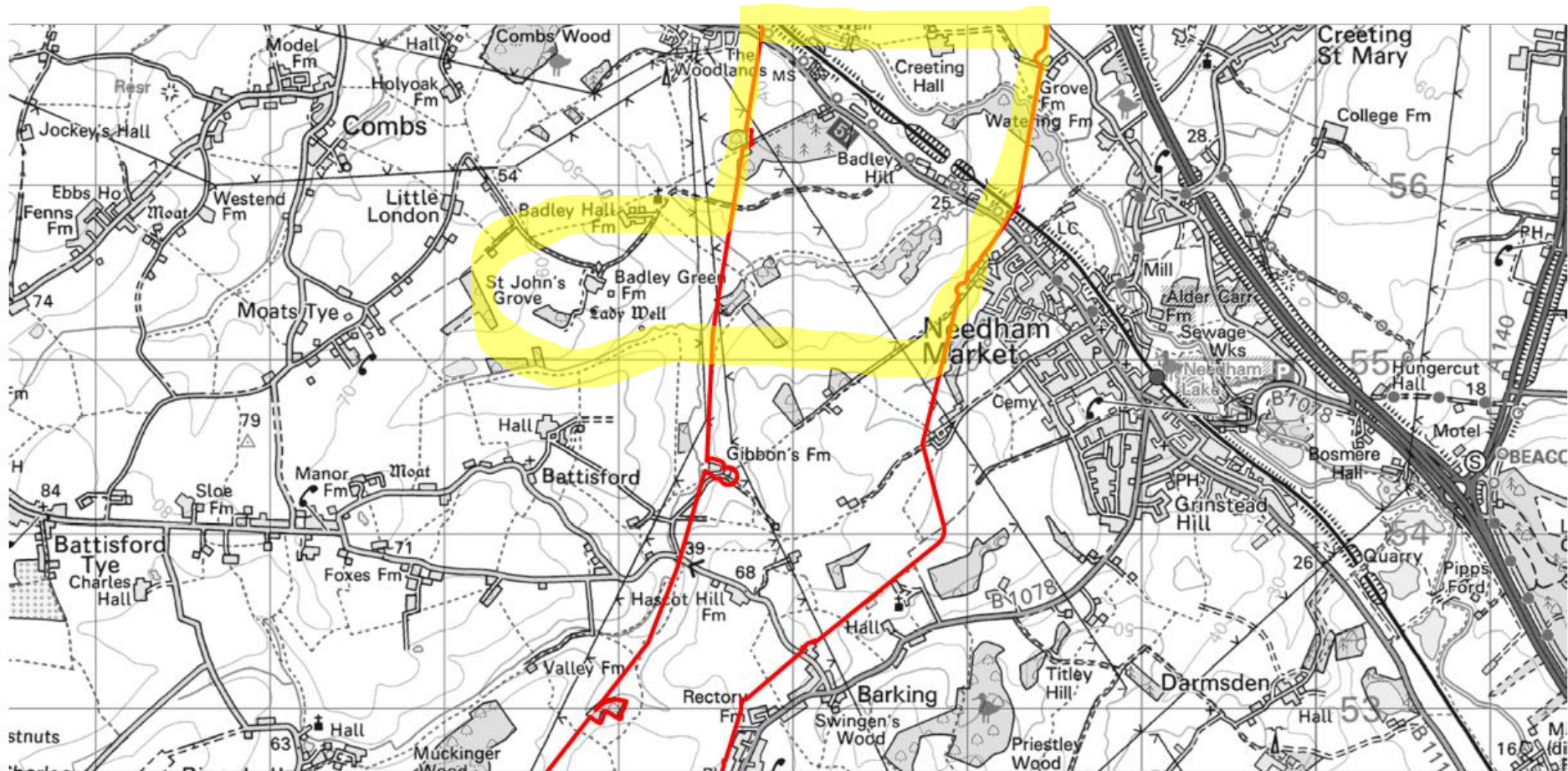
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Map 6: Stowupland, Creeting St Peter & Stowmarket



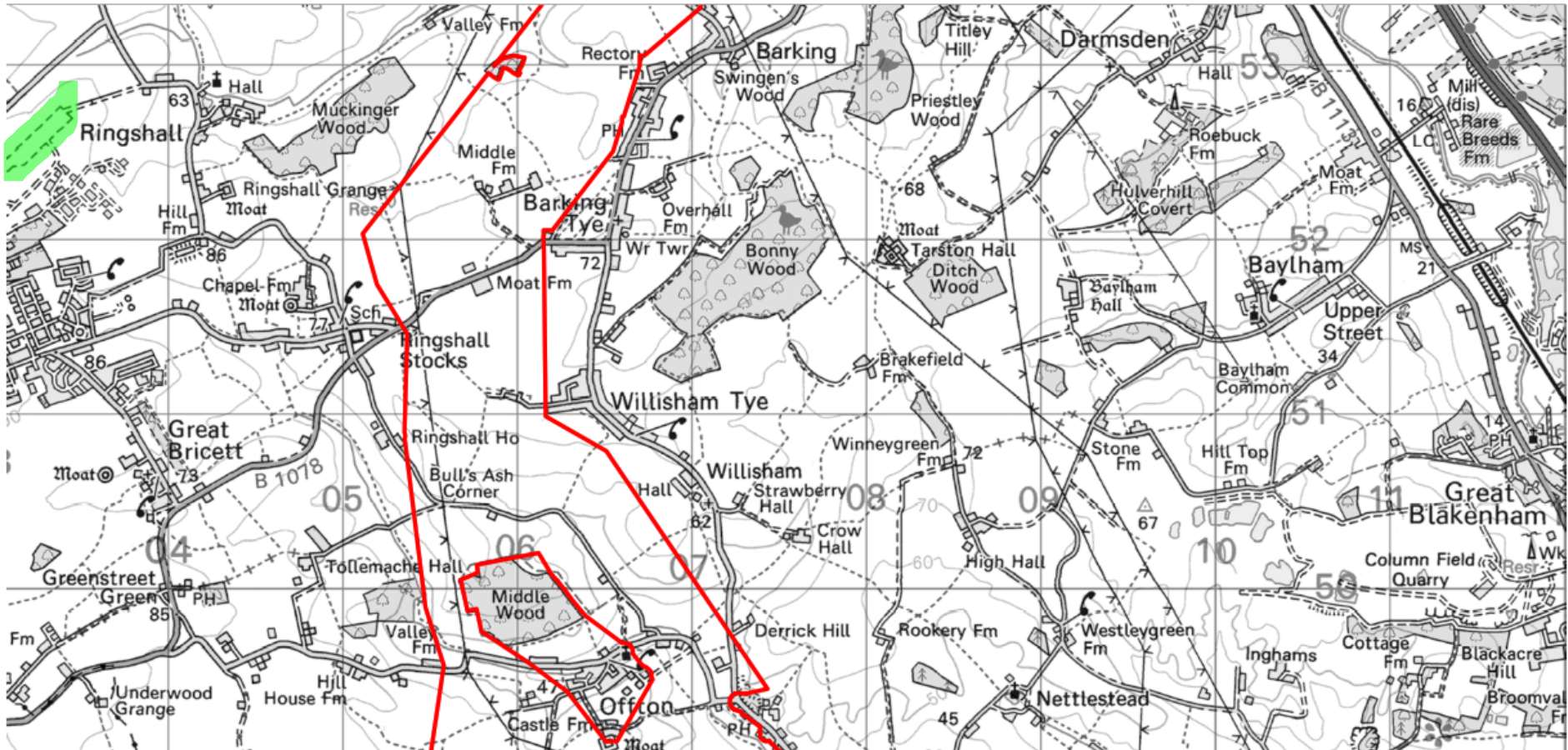
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Map 7: Needham Market & Barking



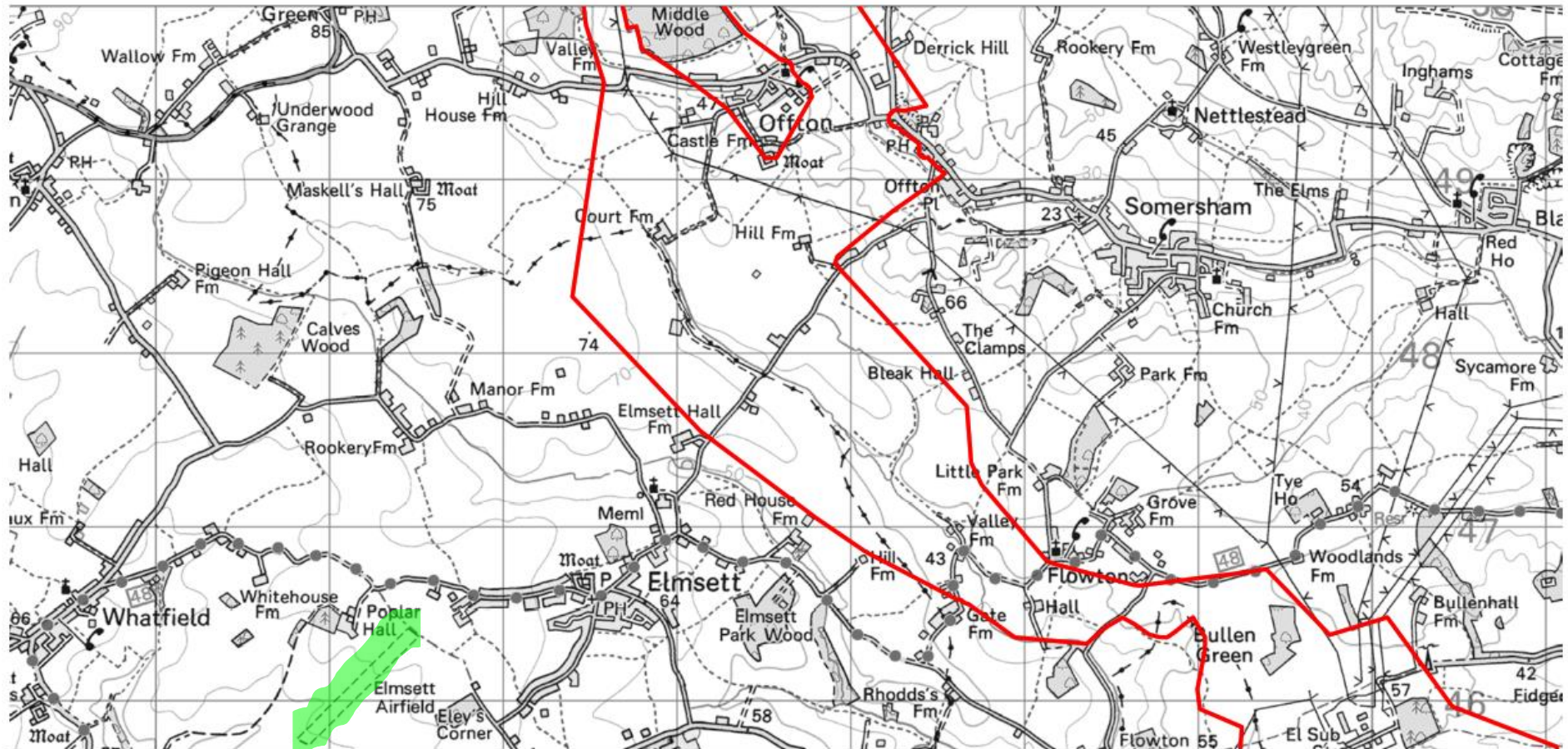
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Map 8: Barking Tye & Offton



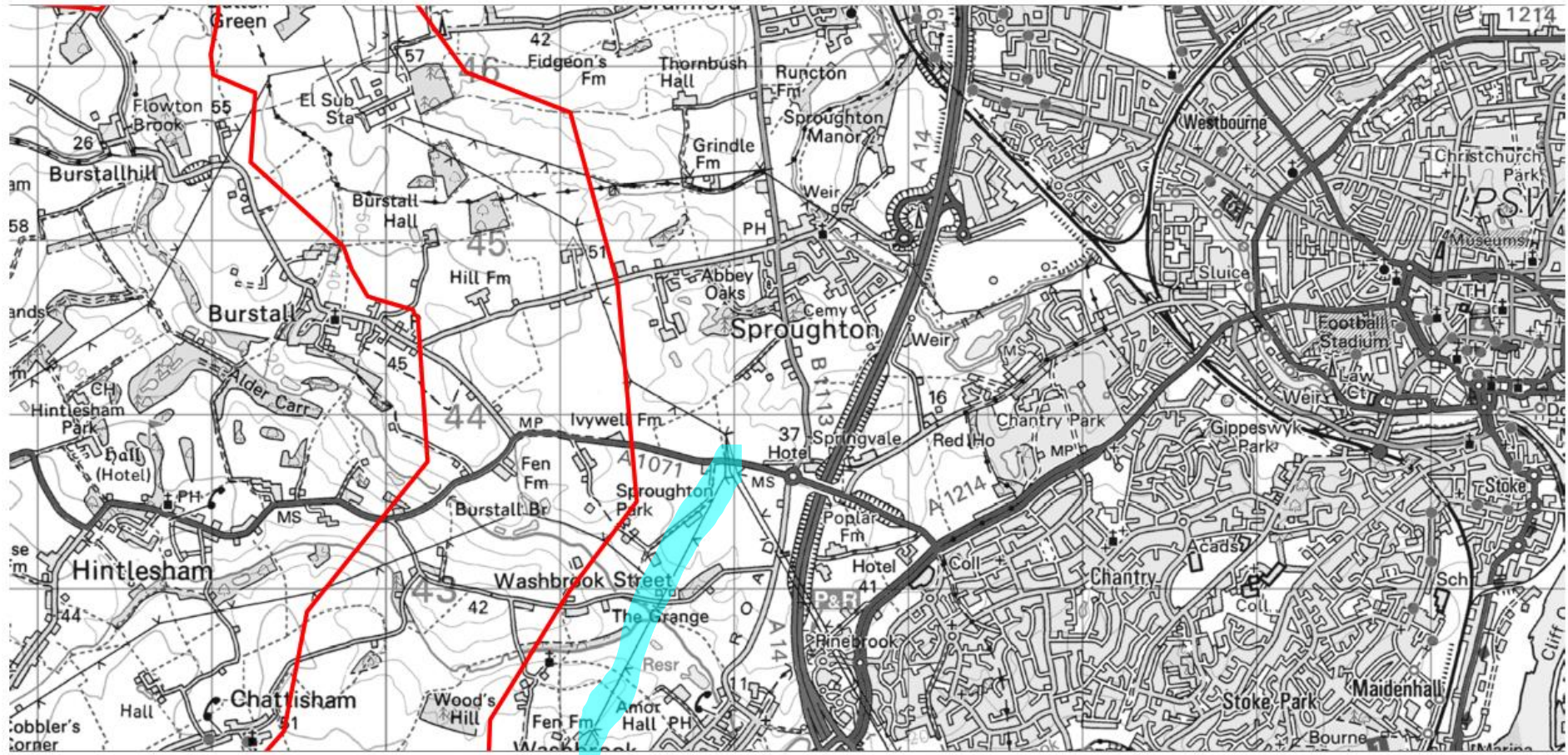
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Map 9: Elmsett & Flowton



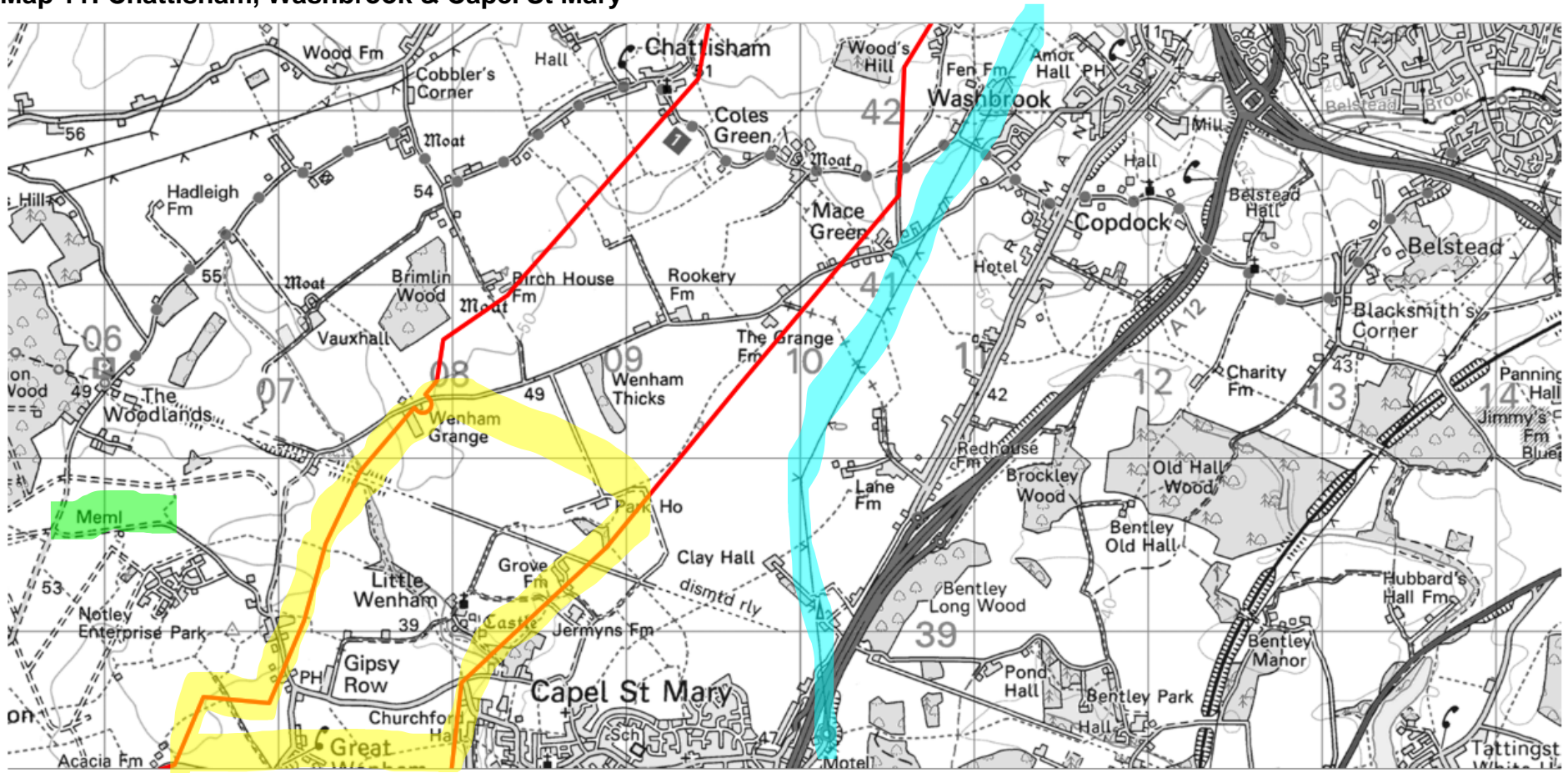
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Map 10: Burstall, Sproughton & Washbrook Street



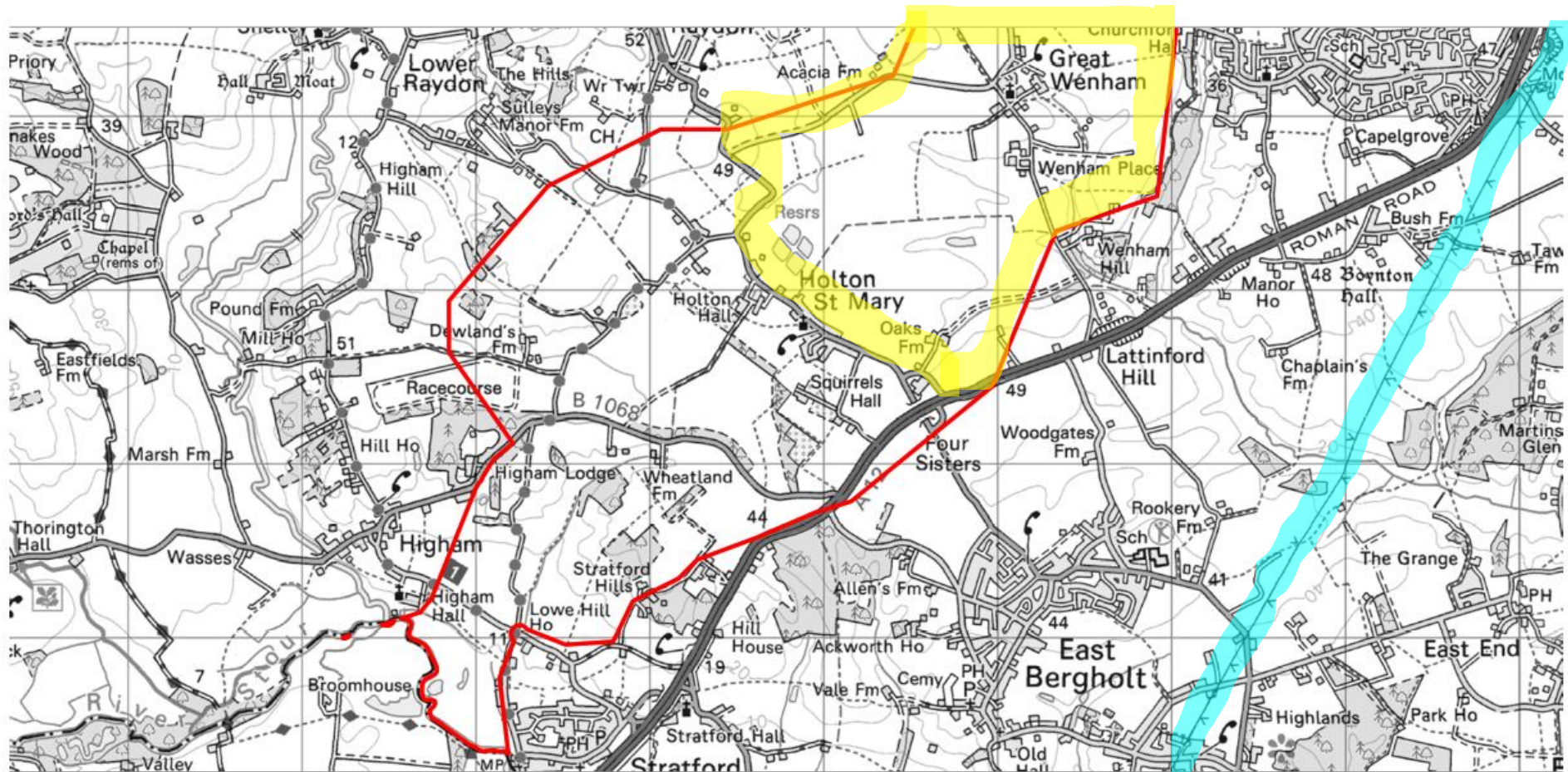
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Map 11: Chattisham, Washbrook & Capel St Mary



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Map 12: Great Wenham, Holton St Mary, Higham and Stratford



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