



Suffolk Minerals & Waste Local Plan

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For more information about our minerals and waste planning policy go to:

<https://www.suffolk.gov.uk/planning-waste-and-environment/planning-applications/minerals-and-waste-policy/>

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1. Executive summary

- 1.1 The Suffolk Minerals & Waste Local Plan (SMWLP) contains planning policies for determining planning applications for minerals and waste development, as well as safeguarding the same from other forms of competing development. Policies include those that specify sites for future minerals and waste development.
- 1.2 The SWMLP takes a positive approach to minerals and waste development that reflects the presumption in favour of sustainable development.
- 1.3 Minerals are vital for continued economic growth including house building. Besides indigenous land-won sand and gravel, the supply of aggregates to Suffolk is made up from sand and gravel imported from surrounding counties, imported crushed rock, marine dredged sand and gravel, and indigenous and imported recycled construction, demolition and excavation waste.
- 1.4 The SMWLP has allocated nine sites for the extraction of sand and gravel sufficient to supply 9.300 Mt over the Plan period to the end of 2036. Policy also states that the County Council will seek to maintain a landbank of permitted reserves of at least seven years based upon the average of the last ten years' sales.
- 1.5 The proposed sites for sand and gravel extraction are located at:
 - a) Barham
 - b) Barnham
 - c) Belstead
 - d) Cavenham
 - e) Layham
 - f) Tattingstone
 - g) Wetherden
 - h) Wherstead
 - i) Worlington

- 1.6 Although there are significant quantities of Local Authority Collected Waste, Commercial and Industrial Waste, Construction, Demolition and Excavation Waste, and Hazardous Waste managed within Suffolk, the Suffolk Waste Study concluded that there is no immediate shortfall in waste management capacity for these waste streams. Applications for new facilities would however be considered in the normal way.
- 1.7 Only one site for waste development has been allocated at Sizewell “A” Nuclear Power Station for the treatment and temporary storage of radioactive material removed as part of decommissioning. Future waste development proposals not allocated in the plan would be considered against criteria-based policies.
- 1.8 Policies for the consideration of planning applications for minerals and waste development have been refreshed, as have safeguarding policies to protect minerals and waste development and minerals resources from other forms of competing development.

2. Introduction

- 2.1 Suffolk County Council is the minerals and waste planning authority for the whole of Suffolk. It is therefore responsible for the determination of planning applications for minerals and waste development, enforcing planning control, and for producing minerals and waste planning policy documents.
- 2.2 The SMWLP contains planning policies for determining planning applications for minerals and waste development, as well as safeguarding the same from other forms of competing development. Policies include those that specify sites for future minerals and waste development.
- 2.3 The format of the SMWLP is intended to be concise and links to supporting documents in the evidence base are provided where appropriate rather than duplicating much of the supporting evidence in the SMWLP itself. The SMWLP develops the theme of sustainable development through general policies, minerals policies, waste policies and site proposals. Appendix 3 includes maps of all the safeguarded minerals and waste sites.
- 2.4 Important supporting evidence for the Plan is contained in the following documents:
- a) the SMWLP Submission Draft Sustainability Appraisal provides detailed consideration of the impacts of the plans vision, aims, objectives, policies and proposals upon the baseline economic, social and environmental conditions;
 - b) the Suffolk Local Aggregates Assessment discusses in detail the provision of aggregates in Suffolk;
 - c) the Suffolk Waste Study provides an analysis of the existing waste management provision in Suffolk and makes projections of future waste arisings over the SMWLP plan period;
 - d) the Site Selection Reports which bring together the information that was considered when selecting sites considered suitable for inclusion in the SMWLP;
 - e) the SMWLP Habitats Regulations Assessment assess the impact of the Plan in terms of the Regulations, and;
 - f) the SMWLP Strategic Flood Risk Assessment assesses the flood risk at each of the sites proposed in the Plan.

- 2.5 The above documents (apart from d) the Site Selection Reports) can be reached by following the link provided. <https://www.suffolk.gov.uk/planning-waste-and-environment/minerals-and-waste-policy/suffolk-minerals-and-waste-plan/>
- 2.6 The Plan has been primarily been drafted within the context of the following Government policy and guidance (see links):
- a) National Planning Policy Framework, which contains the Government's policy on planning;
<https://www.gov.uk/government/publications/national-planning-policy-framework--2>
 - b) National Planning Policy for Waste, which contains the Government's policy on waste planning, and;
<https://www.gov.uk/government/publications/national-planning-policy-for-waste>
 - c) Planning Practice Guidance, which is a website containing the Government's planning practice guidance.
<https://www.gov.uk/government/collections/planning-practice-guidance>
- 2.7 Besides the planning policies contained within the SMWLP, the Development Plan is made up of the planning policies contained within Local Plans adopted by District and Borough Councils within Suffolk and the Broads Authority (see links).
- a) Babergh & Mid Suffolk District Councils Local Plans
<https://www.midsuffolk.gov.uk/planning/planning-policy/>
 - b) The Broads Authority Local Plan
<https://www.broads-authority.gov.uk/planning/planning-policies/development>
 - c) Ipswich Borough Council Local Plan
<https://www.ipswich.gov.uk/services/planning-policy>
 - d) West Suffolk Council Local Plan
https://www.westsuffolk.gov.uk/planning/planning_policies/local_plans/
 - e) East Suffolk Council Local Plan
<https://www.eastsuffolk.gov.uk/planning/planning-policy-and-local-plans/>

3. Vision, aims and objectives

- 3.1 The draft Vision below is intended to be a high-level strategic overview of the intentions of the Plan, without the detail that would be developed later in the Plan through the aims, objectives, policies and proposed sites.
- 3.2 It is written within the context of Government requirements for the planned provision of aggregates, management of waste and environmental protection.
- 3.3 The County Council is required to plan for the provision of aggregates. This includes developing policies for the provision of land-won sand & gravel, aggregates rail depots and wharves, and aggregates recycling depots.
- 3.4 The County Council is also required to plan for net self-sufficiency in waste management whereby it should plan for the equivalent amount of waste to that arising within the County. A limitation on this being the economies of scale particularly where specialist waste streams are concerned.
- 3.5 The plan covers the period to 2036 which would align it with the surrounding counties minerals and waste plan reviews and allow for a time horizon of 15 years and take account of longer-term requirements in accordance with the National Planning Policy Framework.

Suffolk minerals and waste local plan vision 2036

“Suffolk will continue to meet its statutory obligation as required by national policy for the supply of aggregates and the management of waste in a sustainable manner.

Minerals and waste management sites will only be permitted in appropriate locations and will be required to be operated to high standards, so that they do not cause a significantly adverse impact upon the environment, landscape character, historic environment or local amenity or endanger human health.

Temporary minerals and waste management sites will be restored to a quality and state conducive to an appropriate after-use such as flood alleviation, reservoirs, agriculture, forestry, ecology, geomorphological interest or recreation.”

- 3.6 The Vision has been developed further into the following practical Aims & Objectives below. The Aims and Objectives have also taken into account the requirements of the National Planning Policy Framework (NPPF), the National Planning Policy for Waste (NPPW) and the Planning Practice Guidance (PPG) website. The objectives have been translated into policies and proposals for specific sites later in the SMWLP.

Aims and objectives

Aim 1: To make adequate provision for minerals and waste development within Suffolk by:

Objective 1: providing Policies that set out the provision to be made for minerals and waste development within Suffolk, taking into account the need to move waste management up the waste hierarchy, waste net self-sufficiency, and the contribution that can be made from recycled aggregates.

Objective 2: providing a Key Diagram that illustrates a spatial strategy for the location of minerals and waste development and shows centres of population (as an indication of sources of waste arisings and aggregates demand), transport links and areas of constraint.

Objective 3: identifying environmentally acceptable sites for sand & gravel extraction and sites for waste management on the Proposals Map.

Objective 4: providing general Policies for the consideration for planning applications for minerals and waste management development.

Aim 2: To avoid, minimise and mitigate the impact of minerals and waste development on the environment by:

Objective 5: including environmental protection policies for the consideration of minerals proposals that make reference to the impact upon nature conservation, landscape character, the historic environment or human health from noise, dust, air quality, visual intrusion, traffic, tip and quarry slope stability, differential settlement of quarry backfill, flood risk, water resources, contamination and cumulative impacts.

Objective 6: including a policy for the consideration of proposals for borrow pits, agricultural reservoirs, flood alleviation and/or public water supply.

Objective 7: including environmental protection policies for the consideration of waste proposals that make reference to the impact upon water quality, flood risk, land instability, landscape character, visual impacts, nature conservation, historic environment, traffic and access, dust, air quality, odour, vermin and birds, noise, light vibration, litter, land-use conflict and cumulative impacts.

Aim 3: To safeguard minerals and waste development from other forms of development by:

Objective 8: identifying all existing and potential minerals and waste development including rail depots, and port facilities, and added value plant sites e.g. concrete batching, coated stone and aggregate recycling that require safeguarding from other forms of development, directly or by proximity, and providing an accompanying appropriate safeguarding policy.

Objective 9: providing minerals safeguarding plan showing those sand and gravel resources which require safeguarding from other forms of development, directly or by proximity, and an accompanying appropriate safeguarding policy.

4. General polices

Presumption in favour of sustainable development

- 4.1 At the heart of the NPPF is the “presumption in favour of sustainable development” which should be seen as a golden thread running through both the plan-making and decision-taking. Sustainable development is also at the heart of the NPPW.
- 4.2 Sustainable development is defined in the NPPF and is seen as having three equal components: economic, social, and environmental.
- 4.3 In the economic role, sustainable development means contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and co-ordinating development requirements, including the provision of infrastructure.
- 4.4 The social role means supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality-built environment, accessible local services that reflect the community’s needs and support its health, social and cultural well-being.
- 4.5 The environmental role means contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.
- 4.6 An example of how the Plan relates to the historic environment would be by securing archaeological evaluation and recording at a site prior to minerals extraction takes place.
- 4.7 Reflecting this national guidance, Policy GP1 below sets out the County Council’s interpretation of decision making in the context of sustainable development.

Policy GP1: Presumption in favour of sustainable development

The County Council will take a positive approach to minerals and waste development that reflects the presumption in favour of sustainable development.

It will work proactively with applicants to find solutions which mean that proposals can be approved wherever possible, and to secure minerals and waste development that improves the economic, social and environmental conditions in the area.

Planning applications that accord with the site allocations and policies in this Plan will be approved without delay, unless material considerations indicate otherwise.

Where there are no policies relevant to the application or the relevant policies are demonstrably out-of-date at the time of making the decision, the County Council will grant permission unless material considerations indicate otherwise – taking into account whether:

- a) Any adverse impacts of granting planning permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework and National Planning Policy for Waste taken as a whole; or
- b) Specific policies in the National Planning Policy Framework or National Planning Policy for Waste indicate that development should be restricted.

Climate change mitigation and adaptation

- 4.8 Proposed minerals and/or waste development should take into account climate change issues. The Minerals Product Association for example has calculated the average figure for the amount of carbon dioxide (CO₂) produced per tonne of sand and gravel of 3.5kg of CO₂/t of sand and gravel. A significant factor for minimising CO₂ is the use of the latest modular plant which complies with lower emission limits.
- 4.9 Waste development can for example contribute to reducing methane (CH₄) by capturing and utilizing landfill gas to generate electricity. Policy GP2 below sets out the criteria for the consideration of proposals for climate change mitigation and adaptation.

Policy GP2: Climate change mitigation and adaptation

New minerals and waste management facilities should through their construction and operation minimise their potential contribution to climate change through reducing carbon and methane emissions, incorporate energy and water efficient design strategies and be adaptable to future climatic conditions.

Proposals for new minerals and waste facilities should where appropriate:

- a) take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption, including maximising cooling and avoiding solar gain in the summer;
- b) be planned so as to minimise carbon dioxide and methane emissions, and support opportunities for decentralised and renewable or low-carbon energy supply;
- c) give priority to the use of sustainable drainage systems, paying attention to the potential contribution to be gained to water harvesting from impermeable surfaces and encourage layouts that accommodate waste water recycling;
- d) take account of potential changes in climate including pluvial and fluvial flooding, rising sea levels and coastal erosion, and;
- e) incorporate proposals for sustainable travel including travel plans where appropriate.

Spatial strategy and key diagram

4.10 The Key Diagram and Policy GP3 below set out a spatial strategy for minerals and waste development within Suffolk. These following factors have been considered in drafting the key diagram and spatial strategy:

- a) minerals can only be worked where they occur;
- b) crushed rock is imported, primarily by rail from outside of the County via rail heads located along the lines than run between Newmarket and Ipswich;
- c) marine borne crushed rock is landed at wharves at Ipswich and Lowestoft docks;
- d) marine dredged sand and gravel aggregates are landed at Ipswich docks;
- e) aggregates are landed at Ipswich docks are exported by rail;
- f) aggregates recycling facilities should be located with suitable access to the road network and in proximity to centres of population and therefore sources of waste;
- g) in the past landfill dependent on temporary waste management uses followed minerals extraction, whereas waste is increasingly being managed at permanent facilities that are located with suitable highways access in proximity to centres of population and therefore sources of waste;
- h) the Suffolk Lorry Route Network provides a recognised hierarchy of routes and aims to promote safety, protect amenity and avoid poorly located sites;
- i) significant areas of the county are within the statutory landscape designations of the Norfolk & Suffolk Broads, the Suffolk Coast & Heaths and Dedham Vale Areas of Outstanding Natural Beauty;
- j) significant areas of the east and west of the County within statutory ecological designations of Ramsar, Special Protection Areas, Special Areas of Conservation and Sites of Special Scientific Interest;
- k) the assumption is that future patterns of development including house building will be concentrating on existing centres of population and;
- l) the Key Diagram is a broad-brush approach and will not show local designations or small-scale constraints.

Policy GP3: Spatial strategy

Preference will be given to proposals for minerals and waste development in accordance with the Key Diagram where individual sites are well related to the Suffolk Lorry Route Network (or rail network or navigation) major centres of population (namely Ipswich, Lowestoft and Bury St Edmunds) and do not have potentially significant adverse impacts upon features of environmental importance (natural or man-made) or endanger human health.

Environmental criteria

- 4.11 Policy GP4 below provides an environmental checklist for all planning proposals. The County Council will where appropriate consult widely on proposed developments and in doing will seek and take into account the views of statutory bodies including Historic England, Natural England, Environment Agency, the Highways Agency, the Marine Management Organisation and non-statutory bodies including the Royal Society for the Protection of Birds, as well as the local community.
- 4.12 The County Council recommends that applicants engage in pre-application discussions with the County Council and the relevant statutory and non-statutory organisations as a way of establishing the scope and the level of detail of the supporting information to be provided.
- 4.13 It is not the intention of the County Council to restate other policy documents or legislation within this policy, but to provide a general list of issues that would where appropriate be taken into account when reaching a decision upon a particular planning application. This list has been derived from the issues that the NPPF, NPPW and PPG indicate should be taken into account.
- 4.14 Policy GP4 uses the phrase “potentially significant adverse impacts” which could be for example the loss or damage to designated sites of ecological value or to the setting of Scheduled Monument. The views of statutory and non-statutory consultees are of course vital in reaching a decision as to level of impact.



Legend

- Suffolk County
- Urban Areas
- Ramsar
- Special Protection Area
- Area of Outstanding Natural Beauty
- Broads Authority Area
- Special Area of Conservation
- Railway Line
- Strategic Lorry Route
- Zone Distributor Lorry Route
- Local Access Lorry Route



Scale 1:300000
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Minerals and Waste Key Diagram

28/03/2016. Growth, Highways and Infrastructure Directorate
 Endeavour House, 8 Russell Road, Ipswich, Suffolk. IP1 2BX.

Policy GP4: General environmental criteria

Minerals and waste development will be acceptable so long as the proposals, adequately assess (and address where applicable any potentially significant adverse impacts including cumulative impacts) on the following:

- a) pluvial, fluvial, tidal and groundwater flood risk;
- b) vehicle movements, access and the wider highways network;
- c) landscape character, visual impact, setting, and designated landscapes including Areas of Outstanding Natural Beauty and the Broads;
- d) biodiversity including Natura 2000 sites, ancient woodlands and trees;
- e) geodiversity;
- f) historic environment, archaeology, heritage assets and their setting;
- g) public rights of way;
- h) neighbouring land-use;
- i) soil resources including the best and most versatile agricultural land;
- j) noise and vibration;
- k) air quality including dust and odour;
- l) light pollution;
- m) the local water environment;
- n) land instability;
- o) airfield safeguarding;
- p) the differential settlement of quarry backfilling;
- q) mud and aggregates on the road;
- r) litter, vermin and birds;
- s) The use of alternative forms of transport including the use of rail freight shipping should be considered; or
- t) military and civil aviation.

Proposals should meet or exceed the appropriate national or local legislation, planning policy or guidance for each criterion, including reference to any hierarchy of importance. Proposals should aim to achieve a biodiversity net gain. Proposals should demonstrate that when considering the potential for significant adverse impacts upon features of acknowledged environmental importance, that the hierarchy of firstly avoidance, then mitigation and finally compensation has been followed.

5. Minerals policies

Provision of aggregates

- 5.1 The NPPF requires that Minerals Planning Authorities, including Suffolk County Council, should plan for a steady and adequate supply of aggregates.
- 5.2 Besides indigenous land-won sand and gravel, the supply of aggregates to Suffolk is made up from sand & gravel imported from surrounding counties, imported crushed rock, marine dredged sand & gravel, and indigenous and imported recycled construction, demolition & excavation waste (C, D & E waste).
- 5.3 Aggregates are vital for continued economic growth including house building. They are sold loose in an as-raised form or processed into different grades of fine and coarse aggregate, or they may be used to make concrete, mortar and asphalt or other products.
- 5.4 The issues to be taken into account in the provision of aggregates are set out in the NPPF and the PPG. This includes the preparation of a Local Aggregates Assessment based upon a rolling average of ten years' sales and a careful analysis of other factors.
- 5.5 The recently published draft Suffolk Local Aggregates Assessment (LAA) (2018 data) sets out in detail how the demand for construction aggregates is met within Suffolk.
<https://www.suffolk.gov.uk/planning-waste-and-environment/minerals-and-waste-policy/suffolk-minerals-and-waste-plan/>
- 5.6 The LAA indicates the following.
 - a) Recycling is making an important contribution although potential further growth in use is limited by available C, D & E waste and limitations imposed by the quality of the recycled aggregates.
 - b) Imported crushed rock is also making an important contribution although further growth in use is uncertain due to constraints on the productive capacity of existing resources in the East Midlands, the capacity of transport infrastructure in the South West, the unfavourable currency exchange rate of resources in Europe, and the considerable demand for aggregates from projects such as HS2 and Hinkley Point C Nuclear Power Station.
 - c) Although there are large permitted reserves of marine dredged sand and gravel off the coast of East Anglia market forces dictate that the vast majority

of this is landed in London or landed elsewhere and transported by rail to London.

- d) The long-term trend is that less land-won sand and gravel is being extracted due to diminishing resources of higher quality material, planning constraints, less intensive use of aggregates in construction.

House building is often used as a proxy for forecasting the future demand for aggregates. However, housing completion rates continue to be significantly lower than Adopted Local Plan projections let alone ambitious future house building projections. Based on local authority figures, housing delivery across Suffolk is averaging at 2,228 each year. The total number of homes required to be delivered each year is around 3,000. Therefore, in order to achieve the planned number of homes, the current rate of delivery needs to increase by 35%. Further information is included in a report about Local Plans that went Suffolk County Council Cabinet on the 10 October 2017 which can be viewed by following the link: <https://www.suffolk.gov.uk/planning-waste-and-environment/minerals-and-waste-policy/suffolk-minerals-and-waste-plan/>

- e) There are also number of significant infrastructure projects planned in Suffolk. However, how much aggregate will be required from local sources is unclear. Major road schemes have in the past relied upon imported crushed rock rather than sand and gravel from local quarries or borrow pits. Sizewell C may well do likewise if in fact it is ever built. Further information on Nationally Significant Infrastructure Projects (NSIP) can be found by following the link provided.

<https://www.suffolk.gov.uk/planning-waste-and-environment/major-infrastructure-projects/>

- f) The three-year sand and gravel sales average at 1.117 Mt per year is similar to the ten-year sales average of 1.112 Mt per year.
- g) Considering the above therefore, the approach taken has been to build in some flexibility into future provision to be made in the Plan.

Recycled Aggregates

5.7 Over the last twenty years since the introduction of the Landfill Tax there has been a marked increase in the levels of recycled aggregates being produced, mainly from Construction, Demolition & Excavation waste (CD&E).

5.8 The recently published Suffolk Waste Study (SWS) sets out in detail the levels of waste management activity within Suffolk and can be viewed following the link:

<https://www.suffolk.gov.uk/planning-waste-and-environment/minerals-and-waste-policy/suffolk-minerals-and-waste-plan/>

- 5.9 In 2015 for example the SWS indicates that there were 0.529 Mt of C, D&E waste managed within Suffolk of which over 91.4% would be recycled, giving a total figure of 0.484 Mt of recycled aggregates per annum.
- 5.10 In addition, the energy from waste facility at Gt Blakenham recycles 0.060 Mt of bottom ash from Local Authority Collected Waste (LACW) into aggregates per annum.
- 5.11 The types of facilities where recycled aggregates are produced vary from purpose built fixed installations to temporary operations on construction sites. The latter does not require planning permission separately from the County Council. Although the SWS does not indicate a specific capacity gap for aggregates recycling facilities in Suffolk, a proposal for such a facility is included at in the Plan at Cavenham Quarry.
- 5.12 If, in the future proposals for aggregates recycling facilities requiring planning permission are made, then there are criteria-based policies included within the Plan.
- 5.13 All permitted recycled aggregates facilities are safeguarded within the Plan from other forms of competing development.

Importation of crushed rock

- 5.14 Suffolk has no indigenous resources of crushed rock and therefore relies on supplies imported by road, rail or sea. Crushed rock is used primarily in the production of asphalt for road maintenance and construction due to its strength and roughness.
- 5.15 There are a number of railheads located along the A14 and wharves at Ipswich and Lowestoft used for the importation of crushed rock. There is also a wharf at Lowestoft that is used for the importation of armour stone for use in sea defence works.
- 5.16 Although it is not possible to reveal the precise tonnages of crushed rock imported due to commercial confidentiality, it is significant.
- 5.17 Generally speaking, planning permission is not required for wharves or railheads handling crushed rock subject to the requirements of the Town and Country General Permitted Development Order, for example where significant infrastructure is required.
- 5.18 All railheads and wharves handling crushed rock are safeguarded within the Plan from other forms of competing development.

Landing of marine dredged sand & gravel

- 5.19 There are licences for the dredging of up to 9 Mt of sand & gravel off the coast of the East Anglia on an annual basis. Although a significant proportion of this total is dredged, the vast majority of this is landed in London, or sent to London by rail having been landed elsewhere. This is due to the lack of indigenous supplies of aggregates in London.
- 5.20 Although it is not possible to reveal the precise tonnages of marine dredged sand and gravel sold in Suffolk due to commercial confidentiality, it is not very significant compared to the overall level of licenced resources.
- 5.21 Generally speaking, planning permission is not required for wharves or railheads handling sand and gravel subject to the requirements of the Town and Country General Permitted Development Order, for example where significant infrastructure is required.
- 5.22 All aggregates railheads and wharves handling marine dredged sand & gravel are safeguarded within the Plan from other forms of competing development.

Provision of land won sand & gravel

- 5.23 In the 1990s the first Suffolk Minerals Local Plan was based on an annual sub-regional apportionment figure for sand & gravel of 2.43 Mt per annum. In the 2000s the Suffolk Minerals Core Strategy was based initially upon a sub-regional apportionment of 1.73 Mt per annum, which was later revised to 1.62 Mt per annum based on the revised national guidelines.
- 5.24 Suffolk has always sought to meet the sub-regional apportionment, and national guidelines in past Plans and will seek to meet the projected level of sales based on an average of the last ten years' sales within this Plan.
- 5.25 Suffolk has also always sought to maintain a landbank of permitted sand and gravel reserves of at least 7 years which is still a requirement of the NPPF. Historically the annual figure was based on the sub-regional apportionment or the revised national guidelines. The intention now is that this to will be based upon the average of the last ten years' sales in accordance with the NPPF and will be calculated in the annual LAA each year.
- 5.26 The average sales of sand and gravel in Suffolk for the ten years to the 31 December 2017 was 1.112 Mt.
- 5.27 The landbank of permitted sand and gravel reserves on the 31 December 2017 was 11.822 Mt.

- 5.28 If the landbank of permitted reserves is divided by the average of the last ten years' sales, this would be equivalent to 10.63 years' sales, so that in theory if the average of sales was projected forwards then all of the presently permitted reserves of sand and gravel would run out in July 2028.
- 5.29 The Plan period ends on the 31 December 2036. Therefore, the shortfall in permitted reserves is equivalent to 8.37 years or 9.300 Mt based on the 10-year average of 1.112 Mt.
- 5.30 The following policy sets the level of provision for land won for sand and gravel in the Plan period.

MP1: Provision of land won sand and gravel

The County Council will allocate sites for the extraction of sand and gravel sufficient to supply 9.300 Mt over the Plan period to the end of 2036. It will also seek to maintain a landbank of permitted reserves of at least 7 years based upon the average of the last ten years' sales and calculated in the annual Local Aggregates Assessment.

Proposed sites for sand and gravel extraction

- 5.31 The SMLWP allocates the following sites listed in Policy MP2 for sand and gravel extraction. Policy MP1 above states that the County Council will allocate sites containing 9.300 Mt of sand and gravel. Analysis of the submitted information in the relevant Site Assessment Reports indicates that these sites in total contain 13.770 Mt.
- 5.32 However, taking into account the proposed start dates and levels of production at new sites, it is estimated that at least 2.59 Mt of the 13.770 Mt will still remain to be worked which reduces the resources likely to be worked within the plan period to 11.180 Mt.
- 5.33 This would leave a safety margin of 20% which is not considered excessive when considering the uncertainties of future demand for sand and gravel and potential future problems that might arise that prevent one or more of the proposed sites from being developed.
- 5.34 A further reduction to the potential resources is likely due to planning constraints introduced by the Plan. This mainly relates to the requirement to safeguarding existing field boundaries within sites because of the landscape and ecological importance.

Policy MP2: Proposed sites for sand and gravel extraction

The County Council will grant planning permission for sand and gravel extraction from within the following specific sites, as shown on the proposals map, subject to the other relevant policies of the Development Plan.

- a) Site M1 Barham
- b) Site M2 Barnham
- c) Site M3 Belstead
- d) Site M4 Cavenham
- e) Site M5 Layham
- f) Site M6 Tattingstone
- g) Site M8 Wetherden
- h) Site M9 Wherstead
- i) Site M10 Worlington

Borrow Pits

5.35 Borrow pits are in the Suffolk context sand and gravel workings used exclusively for a particular construction project, typically new road construction. The term “borrow pit” comes from the fact that sometimes the extracted sand and gravel is replaced in the resulting void space by surplus low-quality materials such as silt which are not strong enough to carry the weight of the new road or other structure. The main advantage of borrow pits is that they are normally very close to the construction project and are often connected to that project by routes which do not use the public highway.

Policy MP3: Borrow pits

Borrow pits to provide sand and gravel to serve major civil engineering projects will be acceptable as long as:

- a) they are within 10 km of the project site;
- b) the borrow pit is worked and reclaimed as part of the project;
- c) they comply with the general environmental criteria Policy GP4.

Agricultural and public supply reservoirs

5.36 From time to time proposals are made for the creation of reservoirs or flood alleviation schemes that involves the extraction of sand gravel and its removal from site. These reservoirs besides providing water storage capacity can also be a significant source of sand and gravel to supply the general market.

Policy MP4: Agricultural and public supply reservoirs

Proposals for the extraction of minerals (which would involve the removal of mineral off site) to enable the construction of a reservoir for agriculture, flood alleviation and/or public water supply will be permitted where there is a demonstrated need for the storage of water at the capacity proposed at the given location and subject to the proposals complying with the general environmental criteria Policy GP4.

Cumulative environmental impacts and phasing of workings

5.37 Minerals can only be worked where they occur, which is not everywhere. Where viable minerals deposits are present, sometimes more than one minerals company may wish to exploit them at sites which are located closely. This can multiply the impacts of operations to an extent that they become unacceptable. This policy aims to provide clarity as to how the County Council will consider such circumstances.

Policy MP5: Cumulative environmental impacts and phasing of workings

Where a proposed minerals site is considered acceptable (in its own right) but the cumulative impact of a proposal in conjunction with other existing, permitted or allocated minerals sites or other development in the proximity is considered unacceptable, the proposal may be considered acceptable if phased so that one site follows the completion of the other or it can be demonstrated that the adverse cumulative impacts can be adequately mitigated.

Progressive working and restoration

- 5.38 Progressive working and restoration refer to the working of a quarry in phases. For example, some phases of the quarry might be as yet undisturbed. One phase of the quarry would be having the soils and overburden stripped off to reveal the underlying sand and gravel. Another phase would be subject to sand and gravel extraction operations. One phase would be having the soils and overburden replaced following sand and gravel extraction. Another phase would be under a five-year aftercare period following the replacement of the soils. In this way, the area of land actively being worked for sand and gravel is only a part of the overall site at any one time.
- 5.39 In terms of the proposed after-use, applicants should note that ecological interest can be incorporated into most schemes that are primarily for another after-use, such as agriculture for example.

Policy MP6: Progressive working and restoration

Proposals for new mineral workings should be accompanied by a scheme for the progressive working and restoration of the site throughout its life.

Preference will be given to restoration proposals that incorporate a net gain for biodiversity with the creation and management of priority habitats and that support protected priority and Red Data Book Species and/or that conserve geological and geomorphological resources. Such habitats, species and resources should be appropriately and sustainably incorporated into restoration proposals focussed on the historic environment, flood alleviation, reservoirs, agriculture, forestry, amenity, or ecology. Providing links to surrounding habitats is also encouraged.

Aftercare

- 5.40 The outline strategy sets the general parameters of the proposed action required to bring the restored land up to the required standard for the intended after-use. For agricultural after-use for example this can entail a particular pattern of cultivation etc. During the five-year period annual reports are submitted for the approval of the County Council following a site meeting to establish any further action that is required such as the installation of land drainage etc.

Policy MP7: Aftercare

Where the proposed restoration is to an agriculture, forestry, amenity or ecology after-use following minerals extraction, an outline aftercare strategy of five years or more is required prior to the determination of the planning application. The outline strategy should set out the land management proposed to bring the restored land up to the required standard for the proposed after-use. The outline strategy should also allow for additional measures that may be required following the annual aftercare inspection and the subsequent submission of a finalised version of the annual aftercare report detailing the actions required.

Concrete batching plants and asphalt plants

- 5.41 Minerals can only be worked where they occur, which normally within the open countryside. Ancillary development such as concrete batching plants and asphalt plants would not normally be allowed in the open countryside in the absence of adjacent minerals workings and therefore should be removed once minerals extraction has ceased.

Policy MP8: Concrete batching plants and asphalt plants

Proposals for concrete batching plants or asphalt plants at sand and gravel quarries must stipulate the proportion of indigenous sand and gravel that will be used in the production of ready mixed concrete or asphalt.

At sand and gravel quarries, planning permission will be limited to the end date of the quarry planning permission or the when the indigenous material is no longer being used, whichever is the sooner.

Any proposals for concrete batching plants or asphalt plants that are County matters must also comply with the environmental criteria set out in Policy GP4.

Safeguarding of port and rail facilities, and facilities for the manufacture of concrete and asphalt

- 5.42 As important as proposing new minerals development is safeguarding existing, planned or potential facilities from other forms of competing development.
- 5.43 The Government's East Inshore and East Offshore Marine Plans published in 2014 includes Policy PS3 which also refers to the safeguarding of port facilities and can be viewed by following the link provided:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/312496/east-plan.pdf
- 5.44 The South East Marine Plan Area covers part of the Suffolk Minerals and Waste Local Plan Area. The South East Marine Plan is expected to be adopted in 2020. Details of the South East Marine Plan can be found at the link below:
<https://www.gov.uk/government/collections/south-east-marine-plan>
- 5.45 Until the South East Marine Plan is adopted, the Marine Policy Statement applies. In particular, section 3.5 refers to the importance of securing the continuous supply of marine aggregates.

Policy MP9: Safeguarding of port and rail facilities, and facilities for the manufacture of concrete, asphalt and recycled materials

When proposals are made which would result in the loss of or might potentially compromise the use of:

- a) an existing, planned or potential rail head, wharf or associated storage, handling or processing facilities for the bulk transport by rail or sea of minerals, including recycled, secondary and marine-dredged materials, and/or;
- b) an existing, planned or potential site for concrete batching, the manufacture of coated materials, other concrete products or the handling, processing and distribution of substitute, recycled and secondary aggregate material.

Applicants will be required to demonstrate to the County Council that those sites no longer meet the needs of the aggregates industry. Where this is not the case, satisfactory alternative handling facilities should be made available by the developer. Development proposals in close proximity to the above minerals related facilities should demonstrate that they would not prejudice or be prejudiced by those facilities.

Where existing business or other use could have a significant adverse effect in any proposed new development, the applicant must provide suitable mitigation before the development is completed so that the existing use is not disadvantaged by new development.

District and Borough Councils should consult the County Council when a potentially conflicting proposal falls within the 250 metre safeguarding zones as defined in the Appendix 3 Safeguarding Maps. The County Council will then refer to Policies MP9 before providing a consultation response.

Minerals consultation and safeguarding areas

5.46 Paragraph 143 of the NPPF states that in preparing local plans, local authorities should:

“define Minerals Safeguarding Areas and adopt appropriate policies in order that known locations of specific minerals resources of local and national importance are not needlessly sterilised by non-mineral development, whilst not creating a presumption that resources defined will be worked; and define Minerals Consultation Areas based on these Minerals Safeguarding Areas.”

- 5.47 The County Council has defined the Minerals Safeguarding Areas (MSAs) based upon sand and gravel resource information provided by the British Geological Survey. The Minerals Consultation Areas (MCAs) are slightly larger because a buffer of 250 metres has been added around the edges. This additional buffer is designed to avoid potential sterilisation issues arising because of conflicts with potentially sensitive land-uses such as proposed residential development. It is expected that Local Plans will include policies that safeguard minerals if the County Council highlights particular sites during their consultation stages.

Policy MP10: Minerals consultation and safeguarding areas

The County Council will safeguard:

- a) those Minerals Safeguarding Areas located within the Minerals Consultation Areas identified on the Proposals Map from proposed development in excess of five Ha. The County Council will, when consulted by the Local Planning Authority, object to such development unless it can be shown that the sand and gravel present is not of economic value, or not practically or environmentally feasible to extract, or that the mineral will be worked before the development takes place or used within the development;
- b) areas falling within 250m of an existing, planned or potential site allocated in the Plan for sand and gravel extraction. The MPA will advise the Local Planning Authority whether any proposed development might prejudice the future extraction of minerals and should be refused, or whether such development itself might be prejudiced by proposed mineral working.

District and Borough Councils should consult the County Council when a proposal falls within the Minerals Consultation Area as defined on the Proposals Map. The County Council will then refer to Policy MP10 before providing a consultation response. Responsibility for any mitigation required falls on the development that receives planning permission last.

6. Waste policies

Provision of waste management facilities

- 6.1 The NPPW requires that Waste Planning Authorities, including Suffolk County Council, should identify sufficient opportunities to meet the identified needs for their area for the management of waste streams.
- 6.2 Since the introduction of the Landfill Tax in 1996 there has been a radical change in the way in which waste is managed. Before Landfill Tax was introduced in 1996 most waste was landfilled. Now waste management options further up the waste hierarchy predominate. In order of preference the waste hierarchy is:
- a) prevention;
 - b) preparing for re-use;
 - c) recycling;
 - d) other recovery, and;
 - e) disposal.
- 6.3 In terms of planning this means a change from continually planning for new and extended temporary landfills in former quarries and instead the emphasis is now upon permanent fixed facilities in employment areas or on other suitable sites. This Plan is mainly concerned with recycling, other recovery and disposal.
- 6.4 An important goal in the Plan is to aim for net self-sufficiency. Whereby the County Council aims to manage an amount of waste equal to that arising in Suffolk, whilst acknowledging that waste is transported between different areas of the Country. The Plan also has to take into account of the potential to receive London Waste.
- 6.5 The recently published Suffolk Waste Study (SWS) sets out the existing and projected levels of waste arising together with the existing waste management capacity for the following waste streams:
- a) Local Authority Collected Waste (LACW);
 - b) Commercial and Industrial Waste (C&I);
 - c) Construction, Demolition and Excavation Waste (CD&E);
 - d) Hazardous Waste;
 - e) Radioactive Waste, and;
 - f) London Waste

- 6.6 The SWS can be found by following the link provided below.
<https://www.suffolk.gov.uk/planning-waste-and-environment/minerals-and-waste-policy/suffolk-minerals-and-waste-plan/>
- 6.7 The SWS indicates that:
- a) there is no identified shortfall in waste management facilities at the present time;
 - b) there is sufficient landfill capacity within Suffolk to last until the end of the Plan period in 2036;
 - c) LACW arisings will potentially rise to 0.470 Mt per annum in 2036 from 0.397Mt in 2015;
 - d) projections for C&I waste diverge to the extent that by 2036 the high scenario would be 1.039 Mt per annum and the low scenario would be 0.531 Mt per annum from a figure of 0.785 Mt in 2015;
 - e) the projections for CD&E indicate that levels of arisings per annum will decrease from 0.517 Mt in 2015 to 0.350 Mt in 2036;
 - f) hazardous waste (HAZ) is projected to decrease from 0.044 Mt in 2015 to 0.031 in 2036;
 - g) no London Waste has been landfilled within Suffolk for a number of years and therefore it is not considered necessary to plan to receive any;
 - h) the amount of radioactive waste to be managed is very small and much of it can be accepted at normal landfills or at specialised national facilities elsewhere;
 - i) Using the “high” scenarios, total non-hazardous waste arisings by 2036 could be 0.47mt of LACW plus 1.039mt of C&I giving a combined total of 1.509mt of non-hazardous waste arising;
 - j) Using a conservative estimate of a 52% recycling rate, that would leave 0.811 million tonnes of residual waste to be managed, and;
 - k) Table 42 of the Waste Study shows that there are 427,000 tonnes per annum of treatment capacity plus 252,000 tonnes per annum of incineration capacity giving a current total of 679,000 tonnes per annum of active management capacity, supplemented by the availability of landfill for the remaining waste.

Management of waste

6.8 The following policy indicates the levels of waste management development that is expected over the Plan period to 2036. The figures are derived from the SWS and further detail is available within that document. The figures are not limiting but are indicative. Although there is not an immediate identified shortfall in waste management facilities when the need arises the following policies are in place.

Policy WP1: Management of waste (Mt)

The County Council anticipates the following annual levels of waste arisings for which appropriate waste management facilities will be granted planning permission, provided they are in accordance with the Waste Hierarchy and the policies of the Development Plan and there are no other material considerations which indicate otherwise. Waste arisings will be monitored on an annual basis and will inform consideration of when to initiate an early review of the plan if required.

	2015/16	2020/21	2025/26	2030/31	2035/36
LACW	0.397	0.415	0.433	0.452	0.470
C&I	0.795 to 0.769	0.857 to 0.697	0.960 to 0.632	1.039 to 0.574	1.039 to 0.531
CD&E	0.517	0.469	0.434	0.386	0.350
HAZ	0.044	0.039	0.034	0.031	0.031

Proposed sites for radioactive waste management

- 6.9 This policy applies to all sites proposed for waste management. Only one site is named in the policy. Unnamed sites would be determined in accordance with Policy GP1.
- 6.10 Sizewell 'A' Nuclear Power Station is currently undergoing decommissioning. This involves the treatment and temporary storage of radioactive waste. The reactor has been de-fuelled already with the fuel being transported off site to Sellafield. Other less radioactive materials remain on site. Policy WP16 below specifically refers to applications for the treatment and storage of waste at Sizewell Nuclear Power Station. Proposals for managing radioactive waste, including imported radioactive waste from elsewhere would be determined by the County Council.

Policy WP2: Proposed site for radioactive waste management

The County Council will grant planning permission for radioactive waste management on the following specific site, as shown on the proposals map, subject to the other relevant policies of the Development Plan.

- a) Site W1 Sizewell "A" Nuclear Power Station

Existing or designated land-uses potentially suitable for waste development

6.11 Only one site has been proposed for waste development in the SMWLP. Planning applications for waste development on other sites will need to comply with policy WP3. The categories below reflect the desire to protect the open countryside as well as the practical constraints on waste development.

Policy WP3: Existing or designated land-uses potentially suitable for waste development

General waste management facilities (other than landfill sites and water recycling centres) may be acceptable within the following areas:

- a) land in existing waste management use;
- b) land in existing general industrial use (B2 use class) or in existing storage or distribution use (B8 use class) (excluding open air composting);
- c) land allocated for B2 and B8 purposes in a local plan or development plan document (excluding open air composting);
- d) within or adjacent to agricultural and forestry buildings;
- e) agricultural and forestry land (open air composting only) excluding ancient woodland or planted ancient woodland sites;
- f) brownfield land (excluding open air composting);
- g) former airfields (open air composting only);
- h) water recycling centres (including composting and anaerobic digestion) and;
- i) current and former mineral workings (open air composting and construction, demolition and excavation waste recycling only).

Proposals must also comply with the environmental criteria set out in Policy GP4.

Household waste recycling centres

6.12 Household waste recycling centres provide a valuable service to local communities by providing a facility whereby households can bring bulky goods for recycling or disposal. Limited trade waste is also accepted.

Policy WP4: Household waste recycling centres

Household waste recycling centres may be acceptable within purpose designed or suitably adapted facilities on land within the land uses identified within Policy WP3.

Proposals for such facilities at landfill sites may be considered acceptable on a temporary basis whilst landfilling and restoration activity is taking place on site. Any temporary planning permissions will be linked to the time limits relating to the landfill activities on site.

Where it can be demonstrated that no suitable sites consistent with Policy WP3 are available within the area to be served by the household waste recycling centre, household waste recycling centres may be acceptable on other sites provided these are consistent with Policy GP4 and are accessible to the public.

Open air composting

- 6.13 Open air composting is a cost-effective way of recycling green waste so long as it is carefully sited and managed. It involves the piling of green waste in windrows in the open air to promote aerobic degradation. The windrows must be turned regularly, turned to prevent over-heating and anaerobic conditions forming which can give rise to odours.

Policy WP5: Open air composting

Open air composting facilities may be acceptable on land within the uses identified within Policy WP3.

Proposals for such facilities at landfill sites may be considered acceptable on a temporary basis whilst landfilling and restoration is taking place on site.

Proposals for open air composting will not be approved unless they are accompanied by a site-specific risk assessment which shows that the bio-aerosol levels can be maintained, throughout the life of the operations, at appropriate levels at dwellings or workspaces within 250m of a facility. Appropriate schemes for the management of odours and dust will also be required.

Proposals must also comply with the environmental criteria set out in Policy GP4.

In-vessel composting facilities

- 6.14 In-vessel composting facilities promote aerobic degradation of organic waste including green waste and/or food waste within tunnels that have forced air pumped into and extracted out of them and then discharged to the atmosphere via bio-filters that remove odours. The main advantage of this system over open-air composting is that it can take food waste including meat because the requisite temperature can be reached and maintained so that harmful bacteria can be neutralised.

Policy WP6: In-vessel composting facilities

Enclosed composting facilities may be acceptable on land within the uses identified within Policy WP3.

Proposals for such facilities at landfill sites may be considered acceptable on a temporary basis whilst landfilling and restoration is taking place on site.

Proposals for enclosed composting will not be approved unless they are accompanied by a site-specific risk assessment which shows that the bio aerosol levels can be maintained at appropriate levels at dwelling or workspaces within 250m of a facility. Appropriate schemes for the management of odours and dust will also be required.

Proposals must also comply with the environmental criteria set out in Policy GP4.

Anaerobic digestion

6.15 Anaerobic digestion facilities promote anaerobic degradation of organic wastes such as animal wastes, energy crops, and vegetable tailings. The process involves introducing the feedstock into a tank of bacteria rich slurry. This process produces methane gas that is normally used to drive a diesel generator and export the electricity to the grid. The main advantage of this over composting is that electrical power is produced. Co-locating with sewage treatment allows methane to be recovered from sewage and at the same time prevents a potent greenhouse gas from escaping into the atmosphere.

Policy WP7: Anaerobic digestion

Anaerobic digestion facilities may be acceptable on land:

- a) within the uses identified within Policy WP3; or
- b) integrated with waste water treatment plants.

Proposals for such facilities at landfill sites may be considered acceptable on a temporary basis whilst landfilling and restoration is taking place on site.

Proposals must also comply with the environmental criteria set out in Policy GP4.

Proposals for recycling or transfer of inert and construction, demolition and excavation waste

6.16 The recycling of construction, demolition and excavation waste may make a significant contribution to meeting aggregates demand and lessen pressure on land won and marine dredged sources. Although a sustainable source of aggregates the local environmental impacts of the recycling sites are akin to traditional quarries.

Policy WP8: Proposals for recycling or transfer of inert and construction, demolition and excavation waste

Proposals for recycling or transfer of inert and construction, demolition and excavation waste may be acceptable on land within the uses identified within Policy WP3.

At mineral sites, planning permission will be limited to the life of the mineral operation.

Proposals for such facilities at landfill sites may be considered acceptable on a temporary basis whilst landfilling and restoration is taking place on site.

On land suitable for General Industrial (B2) or Storage & Distribution (B8) uses, activities shall take place within purpose-designed facilities.

Proposals must also comply with the environmental criteria set out in Policy GP4.

Waste transfer stations, materials recycling facilities, end of life vehicle facilities and waste electrical and electronic equipment recovery facilities

- 6.17 The main function of a waste transfer facilities is to facilitate the efficient transportation of waste by sorting loads from small collection vehicles such as skip lorries and reloading onto much larger lorries including articulated lorries for onward transportation.
- 6.18 Materials recycling facilities are where recyclable wastes are separated into their different types for onward transportation to recyclers. The remaining waste called residual waste is either sent to landfill or a treatment facility such as an energy from waste facility.
- 6.19 End of life vehicle facilities remove potential pollutants from vehicles, remove the usable parts and sent the scrap items off to recyclers.
- 6.20 Electronic equipment recovery facilities sell on the products for re-use, recycle or deposal.

Policy WP9: Waste transfer stations, materials recycling facilities, end of life vehicle facilities and waste electrical and electronic equipment recovery facilities

Waste transfer stations, material recycling facilities, end of life vehicle facilities and waste electrical and electronic equipment recovery facilities may be acceptable within purpose designed or suitably adapted facilities on land within the uses identified within Policy WP3.

Proposals for such facilities at landfill sites may be considered acceptable on a temporary basis whilst landfilling and restoration is taking place on site.

Proposals must also comply with the environmental criteria set out in Policy GP4.

Residual waste treatment facilities

- 6.21 Policy WP10 sets out the criteria for the consideration of proposals for residual waste treatment facilities. This policy covers both very large and small facilities. There are various residual waste treatment technologies.
- 6.22 Energy from Waste (EfW) is one such technology, which involves the controlled combustion of waste and the use of the waste heat for electricity generation and sometimes a district heating system.
- 6.23 Many EfW smaller systems use waste to supply heat to help dry out other wastes such as plasterboard.
- 6.24 Another technology is Mechanical and Biological Treatment (MBT) whereby waste is macerated and placed in a large hall and turned by a bucket wheel. This composting has the effect of reducing the volume by 50% or more and reducing the biodegradation potential of the residue. The residue is either then landfilled at a reduced taxation rate or processed further to make a fuel.

Policy WP10: Residual waste treatment facilities

Residual waste treatment facilities may be acceptable where the proposed facility is:

- a) on land within the land-uses set out in Policy WP3, and;
- b) the proposals meet the environmental criteria set out in Policy GP4.

Proposals for such facilities at landfill sites may be considered acceptable on a temporary basis whilst landfilling and restoration is taking place on site.

The treatment of waste that could practicably be recycled or composted will not be acceptable. Conditions will be placed on planning permissions to ensure that only residual source-separated or pre-sorted waste is treated. Facilities that burn waste must provide for the recovery of energy and the use of combined heat and power will be encouraged.

Approval of sites for disposal of inert waste by landfilling or landraise

6.25 Proposals for the disposal of inert waste are important for the restoration of former minerals workings. It can allow a much more satisfactory landform to be achieved and provide a more suitable growing medium on sites where soils are very thin or of poor quality.

Policy WP11: Approval of sites for disposal of inert waste by landfilling or landraise

Proposals for the disposal of inert waste by landfilling or landraising may be acceptable where:

- a) the importation of inert waste is required for restoration of a former mineral extraction void or;
- b) the importation of inert waste is required for agricultural improvement;
- c) and there is no acceptable alternative form of waste management further up the Waste Hierarchy that can be made available to meet the need, and;

The proposals comply with the environmental criteria set out in Policy GP4.

The landfilling of inert waste that could practicably be recycled will not be acceptable. Conditions will be placed on planning permissions to ensure that only pre-sorted wastes are landfilled.

Approval of sites for disposal of non-hazardous or hazardous waste by landfilling or landraising

6.26 Even though such proposals are much rarer than in the past due to raised levels of recovery, proposals for the disposal of non-hazardous waste by landfilling or landraising may be made in connection with existing non-hazardous sites.

Policy WP12: Disposal of non-hazardous or hazardous waste by landfilling or landraising.

Proposals for the disposal of non-hazardous or hazardous waste by landfilling or landraising may be acceptable where:

- a) no alternative form of waste management can be made available to meet the need, and;
- b) The proposals comply with the environmental criteria set out in Policy GP4 and progressive restoration requirements of MP6.

The landfilling of waste that could practicably be recycled, composted or recovered will not be acceptable.

For non-hazardous waste conditions will be placed on planning permissions to ensure that only residual source-separated or pre-sorted waste is landfilled. Proposals for landfill gas energy recovery will be required.

Mining or excavation of landfill waste

- 6.27 The mining of waste involves the recovery of materials from an existing landfill site by extracting and processing the deposited waste. The excavation of waste also involves the extraction of waste but does not encompass the recovery of materials.
- 6.28 The mining or excavation of putrescible and/or inert waste has the potential to give rise to significant environmental issues. In the case of putrescible waste, this potentially could result in the rapid release of leachate, landfill gas, and odours. The mining or excavation of waste may also disturb previously restored sites or delay the final restoration of sites. Considering the above it is therefore concluded that there are only certain circumstances where waste mining or excavation are justified.

Policy WP13: Mining or excavation of landfill waste

The mining or excavation of landfill waste will be considered favourably where it is demonstrated clearly that:

- a) without mining or excavation of waste, the site is posing a significant risk to human health or safety, and/or;
- b) without mining or excavation of waste, the site is posing a significant risk to the environment or;
- c) removal is required to facilitate a major infrastructure project or;
- d) the proposals would result in the management of the excavated waste higher up the waste hierarchy and there would be significant local and global environmental benefits in doing so, and;
- e) the proposals include detailed information upon how the types of waste deposited within the landfill are to be managed, and;
- f) the proposals comply with the environmental criteria set out in Policy GP4 and progressive restoration requirements in MP6.

It must be demonstrated that any waste can be handled and if necessary removed from the site without posing additional significant risk to human health or safety, or to the environment.

Waste water treatment

6.29 With increasing populations and water quality standards there is continuing investment being made into waste water treatment. Although changes made to permitted development rights have sought to remove the need for planning applications for very small developments there are still applications that need to be determined.

Policy WP14: Water recycling centres

Proposals relating to the role, function and operation of water recycling centres including the provision of additional sewage treatment capacity and supporting infrastructure (including renewable energy) will be supported in principle particularly where it is required to meet the wider growth proposals identified in the Development Plan.

New or extended water recycling centres may be acceptable where such proposals aim to improve the quality of discharged water or reduce the environmental impact of operation. The developer will be required to demonstrate that the proposal does not give rise to unacceptable environmental impacts.

Proposals must also comply with the environmental criteria set out in Policy GP4.

Transfer, storage, processing & treatment of hazardous waste

Hazardous waste travels considerable distances to specialised facilities so that the Country is truly interdependent. Volumes are small compared to the main waste streams.

Policy WP15: Transfer, storage, processing & treatment of hazardous waste

Facilities for the transfer, storage, processing and treatment (including incineration) of hazardous waste will be acceptable on land:

- a) in existing general industrial use (B2), in storage and distribution use (B8) or identified for these uses in a development plan document or;
- b) integrated within an establishment producing much of the waste that will be dealt with.

Facilities for the transfer and short-term storage of hazardous waste will also be acceptable on existing waste management sites identified as having potential for non-hazardous waste transfer where hazardous waste will only represent up to 5% of waste managed on site.

Proposals must also comply with the environmental criteria set out in Policy GP4.

Treatment and storage of radioactive waste at Sizewell nuclear power stations

6.30 Sizewell 'A' Nuclear Power Station had two Magnox reactors and generated electricity between 1966 and 2006. Sizewell 'A' is currently undergoing decommissioning. The most recent waste related planning application determined was for a Fuel Element Debris (FED) facility.

6.31 Sizewell 'B' Nuclear Power Station has a single Pressurised Water Reactor (PWR) and started generating electricity in 1995 and is planned to continue generating until 2035. The most recent waste related planning application determined was for a dry fuel store.

6.32 The Energy Act (2004) requires the Nuclear Decommissioning Authority (NDA) to review and publish its strategy every 5 years. This can be viewed on the NDA website by following the link provided below:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/518669/Nuclear_Decommissioning_Authority_Strategy_effective_from_April_2016.pdf

Policy WP16: Treatment and storage of radioactive waste at Sizewell nuclear power stations

Planning permission for the treatment and/or interim storage of radioactive waste at Sizewell nuclear power stations may be granted within the licensed area subject to the applicant demonstrating that the proposed development:

- a) is consistent with national strategies for radioactive waste management;
- b) there are exceptional circumstances why the development is justified within the Suffolk Coasts & Heaths Area of Outstanding Natural Beauty;
- c) includes adequate measures to mitigate adverse impacts on the environment and local community or, as a last resort, proportionately compensate for or offset such impacts;
- d) is supported by robust economic and environmental assessments;
- e) utilises the existing rail link for the transportation of the radioactive waste unless it is demonstrated to be economically or practically unviable, and;
- f) the proposals comply with the environmental criteria set out in Policy GP4.

Design of waste management facilities

6.33 Policy WP17 sets out the criteria for the consideration of the design of waste management facilities. This policy is important particularly when large facilities such the Energy from Waste Facility at Gt Blakenham are planned, because such a large building is a significant feature in the landscape and so an attractive design is desirable.

Policy WP 17: Design of waste management facilities

Waste management facilities will be considered favourably where they incorporate:

- a) designs of an appropriate scale, density, massing, height and materials;
- b) safe and convenient access for all potential users;
- c) schemes for the retention of existing and provision of new landscape features;
- d) measures which will protect, preserve and where practicable enhance the natural, and historic environment including the setting, landscape and built environment, and:
- e) comply with Policy GP2.

Safeguarding of waste management sites

6.34 The safeguarding of waste sites is necessary to protect them from other forms of development which might either directly or indirectly impact upon waste development. Likewise, applications for new development in the proximity to existing or proposed waste development should take into account any potential conflicts.

Policy WP18: Safeguarding of waste management sites

The County Council will seek to safeguard existing sites and sites proposed for waste management use as shown on the Proposals & Safeguarding Maps and will object to development proposals that would prevent or prejudice the use of such sites for those purposes unless suitable alternative provision is made.









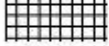


Development proposals in close proximity to existing sites, should demonstrate that they would not prejudice or be prejudiced by a waste management facility. The safeguarding policy will also apply to any site where planning permission has already been granted.

Where existing business or other use could have a significant adverse effect in any proposed new development, the applicant must provide suitable mitigation before the development is completed so that the existing use is not disadvantaged by new development.

District and Borough Councils should consult the County Council when a potentially conflicting proposal falls within the 250 or 400 metre safeguarding zones as defined in the Appendix 3 Safeguarding Maps. The County Council will then refer to Policies WP18 before providing a consultation response.

7. Proposed minerals sites

7.1 The following inset maps show the proposed sites for sand and gravel extraction. For each site, relevant background information is provided for the benefit of potential applicants and the local community.

Key	
	Proposed Site
	Existing Site
	Statutory Landscape Designation (One of the following) -Area of Outstanding Natural Beauty -Norfolk & Suffolk Broads
	Non-Statutory Landscape Designation -Special Landscape Area
	Statutory Ecological Designation (One or more of the following) -Site of Special Scientific Interest -Special Protection Area -Special Area of Conservation -Ramsar Wetlands -National Nature Reserves -Local Nature Reserves
	Non-Statutory Ecological Designation -County Wildlife Site
	Suffolk Lorry Route Network
	Rights of Way
	Historic Parks and Gardens
	Conservation Area
	Scheduled Monument

8. Barham

Proposed development

- 8.1 The proposed developments represent modest extensions to the existing long-standing sand and gravel quarrying operations at Sandy Lane, Barham, which is operated by Brett.
- 8.2 Currently sand and gravel is extracted and transported to the processing area at nearby Shrubland Quarry. Restoration would entail the importation of inert fill materials but would need to maintain access to the geological deposits that the SSSI is noted for.
- 8.3 The established road access uses Sandy Lane, the C445 and the C492 (the old A45) to reach the access to Shrubland Quarry. None of these roads are part of the Suffolk Lorry Route Network. The route to Shrubland Quarry passes many residential properties.
- 8.4 These sites were previously included in the Suffolk Minerals Specific Site Allocations DPD, but no planning application was received due to the prevailing economic conditions.

Geology

- 8.5 The supporting geological evidence indicates that a total extractable resource of 0.600 Mt is contained within the site that covers 6.858 Ha. The deposit is similar to the existing workings being mainly sand.

Development Plan and planning applications

- 8.6 Babergh District Council and Mid Suffolk District Council are currently preparing a joint local plan. Proposals for housing may be included close to the southeast of the existing site on agricultural land and along Sandy Lane. Housing developers are advised that they should provide adequate mitigation in respect of the permitted sand and gravel quarry (which is likely to be sufficient for the proposed extension areas).

Highways

- 8.7 Hedgerow vegetation must be maintained so that it is kept clear of the visibility splay both where the access joins Sandy Lane and where Sandy Lane meets Norwich Road.

Landscape

- 8.8 Working and restoration proposals should take into account the potential impacts on the wider landscape.

Historic Buildings

- 8.9 The Grade 1 listed medieval church of St Mary lies approximately 350m SE. Shrublands Park which is Registered Park and Garden and is also on the Heritage at Risk Register lies approximately 250m NW.

Archaeology

- 8.10 The site has an extremely high potential for heritage assets with archaeological interest relating to a wide range of periods. Evidence for occupation of later prehistoric, Roman, Anglo-Saxon and Medieval date is recorded from the vicinity, derived principally from artefact scatters, including possible burial of Anglo-Saxon date (BRH 016).
- 8.11 Previous archaeological investigations undertaken ahead of the current phases of extraction, have identified settlement remains of Bronze-Age (BRH 015, BRH 043), Iron-Age (BRH 013, BRH015, BRH 024, BRH 043) and Roman (BRH 015, BRH 019, BRH 043) date.
- 8.12 The County Historic Environment Record (HER) also records that over many years' human skeletons and pottery have been recovered from the gravel workings immediately west of the proposed extensions. These burials are likely to be medieval, and Anglo-Saxon in date (BRH 009).
- 8.13 Of particular note is the high potential for faunal, environmental and possible artefactual remains of Palaeolithic date, associated with an intact palaeosol ('fossil' soil horizon) considered to have a composite origin dating from both the Cromerian and early Anglian stages (SSSI. Sandy pit, Barham).
- 8.14 There is a WWII pill box in the SW corner of the existing site which should be preserved.
- 8.15 An archaeological field evaluation, and deposit modelling for Palaeolithic potential will be required at an appropriate stage prior to the granting of any planning permission to allow for preservation in situ, where appropriate, of any sites of importance that might be defined (and which are currently unknown) and to allow archaeological preservation or mitigation strategies to be designed. Changes to the way the site is worked may be required to ensure that the Palaeolithic potential is properly managed and recorded.

Ecology

- 8.16 Potential impacts upon nature conservation interest including Sandy Lane Pit, Barham geological SSSI, The Oak Wood/Broomwalk Covert County Wildlife Site, the underlying Groundwater Source Protection Zone and protected species including Otters, Bats and Great Crested Newts need to be adequately assessed and where necessary mitigation proposed.

Air Quality

- 8.17 The extensions are both currently agricultural land. It is anticipated that operations would commence on site in 2020 and be operational for eleven years.
- 8.18 Air Quality near the site is currently good; there are no Air Quality Management Area declared by Mid Suffolk District Council (the closest AQMAs are over 6km south, within Ipswich).
- 8.19 There are three properties within 250m of the extension site boundaries, including two residential properties (Barham Lodge and Nursery Wood Lodge, both >200m) and another to the south which appears to be an agriculture related property (approx. 115m).
- 8.20 The SSSI is almost entirely encompassed within the boundary of the existing Barham Quarry boundary. The APIS database has not identified any sensitive features associated with this SSSI. There are no other statutory habitat sites within 250m of the proposed extensions.
- 8.21 There is a risk of cumulative impacts where extraction activities coincide with activities on the existing quarry site.
- 8.22 It is expected that an air quality assessment would be submitted with the planning application for the extensions which considers the potential impacts of increased dust and pollutant concentration associated with the extraction process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the sites to minimise the identified risk of impacts at the identified properties.

Noise

- 8.23 Assuming standard mitigation measures such as the use of earth screening bunds as barriers, no other mitigation measures are required.

Public Rights of Way

- 8.24 Footpaths run along and across the quarry access route but there have been no conflicts reported in the past.

Floods

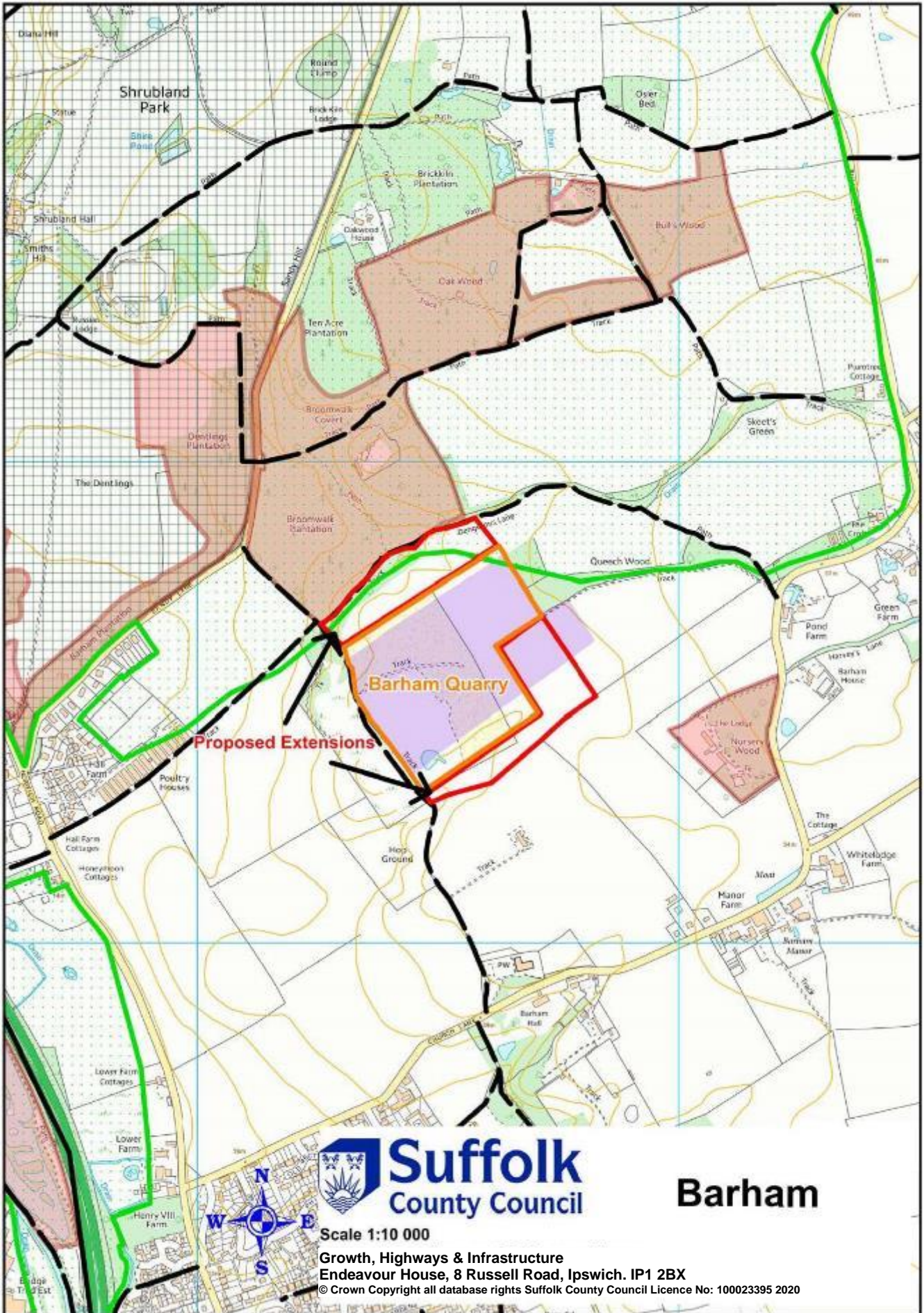
8.25 Proposals need to consider the potential implications for ground water resources and controlled waters.

Policy MS1: Barham

Development will be acceptable so long as the proposals, adequately address the following:

- a) the cutting of vegetation within the visibility splay where the quarry access joins Sandy Lane and where Sandy Lane joins Norwich Road;
- b) the impact of the proposals upon the boundary vegetation and the wider Special Landscape Area;
- c) the provision of an archaeological field evaluation and deposit modelling for Palaeolithic potential at depth;
- d) potential impacts upon natural history interests including Sandy Lane Pit Barham SSSI, the Oak Wood/Broomwalk Covert County Wildlife Site, and protected species including Otters, Bats, Great Crested Newts, Turtle Dove and Nightingale;
- e) future access to Sandy Lane Pit Barham geological SSSI;
- f) the provision of an air quality assessment which considers the potential impacts of increased dust and pollutant concentration associated with the extraction and infilling process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the site to minimise the risk at residential properties within 250m;
- g) the provision of measures to mitigate noise;
- h) the shared use of the public footpath which also forms the quarry access;
- i) the implications for the underlying groundwater source protection zone and controlled waters; and
- j) the potential impact upon the settings of the Grade I listed medieval church of St Mary and Shrublands Park.

Proposals must also be generally in accordance with other policies of the development plan including the environmental criteria set out in Policy GP4.



9. Barnham

Proposed development

- 9.1 This is a proposed extension to an existing quarry that was originally granted planning permission to supply the construction of the A11 Elveden bypass. Although the soils were stripped from the surface and formed into a screening bund the sand and gravel were not required for the A11 construction.
- 9.2 The proposal is to work the area surrounding of the existing quarry. Working would be seasonal as with the existing planning permission and avoid the Stone Curlew nesting season. The intention is to import inert materials to aid restoration.
- 9.3 The proposed access to the site would utilize the existing permitted dump truck haul route which is 7km in length across farmland to Contract Farm. This would include the need for a signalised junction where the haul route crosses the B1106. From Contract Farm road going lorries would travel a short length of the former A11 which is now a private road until the lorries reach the B1106 and the wider highways network including the adjacent A11.
- 9.4 The B1106 is classified as a Local Access Lorry Route and the A11 as a Strategic Lorry Route in the Suffolk Lorry Route Network. Between Contract Farm and the B1106 the lorries would pass Elveden Church of England Primary School. The route would be reversed to bring in inert fill materials.

Geology

- 9.5 The supporting geological evidence estimates a total resource of 2.570 Mt of sand and gravel within the site that covers 89.800 Ha. Boreholes drilled in 1989 across parts of the site show an overall grading of 30% stone, 62% sand and 8% silt.

Development Plan and planning applications

- 9.6 The proposed development straddles both Forest Heath District Council and St Edmundsbury District Council Areas.
- 9.7 There are no adopted or draft plan proposals or planning applications which conflict with the proposed developments.

Highways

- 9.8 A safe crossing of the B1106 for dump trucks needs to be maintained as well as appropriate traffic management around school.

Landscape

- 9.9 The site is located within a Special Landscape Area and suitable proposals for mitigation during working and restoration would be required.

Historic Buildings

- 9.10 There are a number of historic buildings associated with the Barnham Atomic Bomb Store which is a Scheduled Monument and Barnham Camp.

Archaeology

- 9.11 The Breckland landscape, particularly along river valleys, such as the Little Ouse, has been shown to have high potential for archaeological remains of prehistoric and later occupation.
- 9.12 Archaeological potential for later prehistoric occupation is indicated by cropmarks of numerous ring ditches (BNH 023, BNH 023, BNH 024, BNH 025, BNH 005, BNH 035, BNH 051) identified in the vicinity, which represent the remains of burial mounds, such as the Scheduled Bowl Barrows (NHLE 1018041, 1018099). Further evidence of prehistoric (BNH 040, BNH 009), Roman (ELV 004), Anglo-Saxon (BNH 001, BNH 030, BNH 007) and Medieval (BNH 003, BNH 022, BNH 068) occupation (BNH 022) comes from surface finds scatters, undated earthworks (BNH 055) and artefacts recovered by metal-detecting, recorded on the County Historic Environment Record (HER) and national PAS database.
- 9.13 The site also has potential with regards to WWI, WWII and Cold War military history, Barnham Camp (BNH 054), and which may relate to the Scheduled Atomic Bomb Store (NHLE 1020781).
- 9.14 There has been no systematic archaeological investigation of this site. The British Geological Survey records the presence of deposits, which have potential for Palaeolithic and faunal, environmental, and possible artefactual remains. Deposit modelling is needed to determine the level of this potential across the site.
- 9.15 Any planning application must be supported by the results of a programme of archaeological evaluation, including appropriate fieldwork, and should demonstrate the impacts of development/extraction on archaeological remains, including deposits with Palaeolithic potential, and proposals for managing those impacts.

- 9.16 Archaeological field evaluation, AND deposit modelling for Palaeolithic potential, will be required at an appropriate stage prior to the granting of any planning permission to allow for preservation in situ, where appropriate, of any sites of importance that might be defined (and which are currently unknown) and to allow archaeological preservation or mitigation strategies to be designed.
- 9.17 It is possible that following a program of archaeological assessment, some parts of this site may be found to contain heritage assets of sufficient significance to trigger NPPF 139, and therefore, potentially require preservation in situ.

Ecology

- 9.18 Potential impacts upon nature conservation interest including Breckland SPA, Breckland SAC, Breckland Farmland/Little Heath/Thetford Heaths SSSI, Gorse Grassland CWS, Thetford Heath NNR, European Protected Species (Bats and Great Crested Newt), Priority Species, Other Protected Species, Priority Habitats (Lowland Heath). Appropriate surveys potentially leading to mitigation would be required.

Air Quality

- 9.19 The site will potentially be operational for more than thirty years from 2018.
- 9.20 Air Quality near the site is currently good; the closest Air Quality Management Area is located approximately 26km southwest of the site, in Newmarket.
- 9.21 A number of residential properties lie within 250m of the proposed site boundary. This includes properties alongside Elveden Road to the east and west of the site.
- 9.22 The site encompasses parts of the Breckland SPA and Breckland Farmland SSSI and lies adjacent to the Breckland SPA/SAC and Thetford Heaths SSSI. Features sensitive to nitrogen deposition are identified by APIS for these sites.
- 9.23 The site is anticipated to generate 60 HGV movements per day, which is below the threshold defined within the IAQM/EPUK guidance, and therefore traffic emissions are unlikely to significantly increase local pollutant concentrations.
- 9.24 It is expected that an Air Quality Assessment would be submitted with the planning application for the site which considers the potential impacts of increased dust and pollutant concentrations associated with the extraction process, and which defines the mitigation and monitoring which will be implemented at the site to minimise the identified risk of impacts at the identified receptors.

Noise

9.25 In addition to standard noise mitigation measures such as the use of earth bunds as barriers, standoff buffer areas may be required.

Public Rights of Way

9.26 The site abuts a strategic regional trail, Barnham Byway no.2 (Icknield Way) adjacent to the western edge of the site. An appropriate buffer zone would be required. The precise details of which would depend upon details of site bunding etc.

Floods

9.27 Proposals need to consider the potential implications for ground water resources and controlled waters. Barnham is in a Groundwater Source Protection Zone.

Services

9.28 Various services cross the site including a high-pressure gas pipeline, irrigation pipelines, and overhead power lines. Proposals need to show either how this infrastructure will be safeguarded or removed.

Policy MS2: Barnham

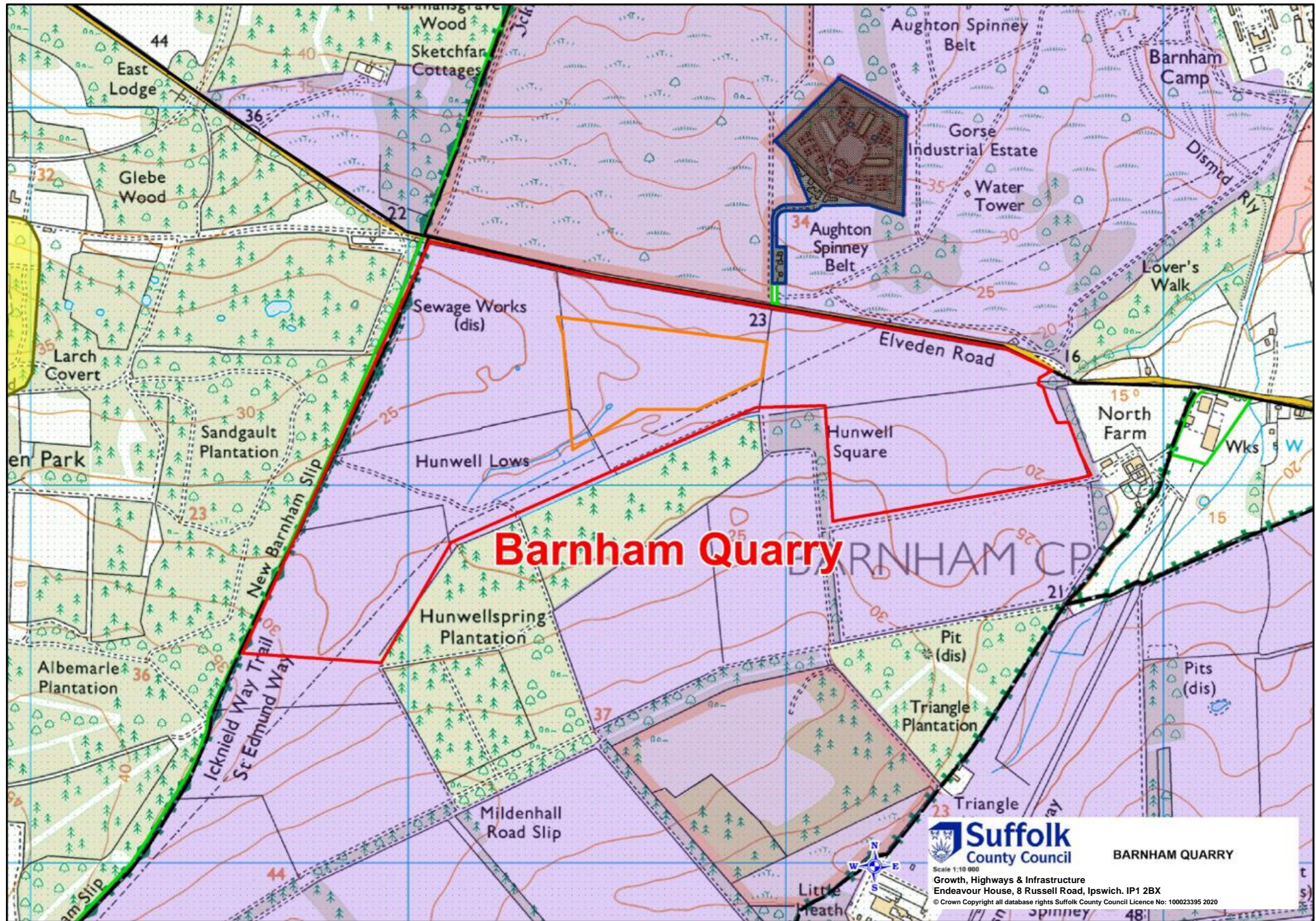
Development will be acceptable so long as the proposals, adequately address the following:

- a) the seasonal working of the minerals to avoid the Stone Curlew nesting season;
- b) the importation of inert wastes to aid restoration;
- c) the use of a suitable means of highways access to reach the site;
- d) the provision of a signalised junction where any haul road crosses the B1106;
- e) the storage of stockpiled material at Contract Farm if the off-road haul route is used;
- f) measures to maximise highway safety and minimise amenity impacts at Elveden Primary School if the off-road haul route is used;
- g) provision of a phased working and restoration scheme that is sympathetic to the Special Landscape Area, the Brecks landscape and the Special Protection Area;
- h) the provision of an archaeological field evaluation and deposit modelling for Palaeolithic potential at depth, leading potentially to if necessary preservation in situ of artefacts in parts of the site;
- i) measures to safeguard and enhance the setting of the Barnham Atomic Bomb Store Scheduled Monument and listed buildings in the vicinity of the site;
- j) potential impacts upon nature conservation interest including Breckland SPA, Breckland SAC, Breckland Farmland/Little Heath/Thetford Heaths SSSI, Gorse Grassland CWS, Thetford Heath NNR, European Protected Species (Bats and Great Crested Newt), Priority Species, other Protected Species, Priority Habitats (Lowland Heath) including the provision of a project level Habitats Regulations Assessment, that would make clear the broad avoidance and/or mitigation measures and robust monitoring, identified at a strategic level that will be required and that restoration will ensure delivery of a net biodiversity gain long term, specifically with regard to the Breckland Special Protection Area;
- k) the provision of an air quality assessment which considers the potential impacts of increased dust and pollutant concentration associated with the extraction and infilling process, the potential for cumulative impacts, and which defines the mitigation and monitoring

which will be implemented at the site to minimise the risk at residential properties within 250m and to the Special Protection Area;

- l) the provision of measures to mitigate noise;
- m) an appropriate buffer zone to safeguard the Icknield Way;
- n) the implications for the underlying groundwater source protection zone, controlled waters and flooding;
- o) the safeguarding or removal of all services which are within or close to the site;
- p) only inert waste materials would be used to help restore the site;
- q) a traffic management plan drafted to avoid traffic routeing through local villages including Barnham except in the case of local deliveries.

Proposals must also be generally in accordance with other policies of the development plan including the environmental criteria set out in Policy GP4.



10. Belstead

Proposed development

- 10.1 The proposed development would involve sand and gravel extraction on land at Belstead which is currently in agricultural use. Some backfilling of the resultant void with inert wastes would follow.
- 10.2 The proposed access would be directly onto the grade separated junction via an existing agricultural access onto the A12 at Belstead.

Geology

- 10.3 The supporting geological evidence estimates a total resource of 3.550 Mt of sand and gravel from the site which covers 34.990 Ha. Boreholes drilled in 2017 across parts of the site show an overall grading of 31% stone, 63% sand and 6% silt.

Development Plan and planning applications

- 10.4 There are no Babergh District Council adopted or draft plan proposals that conflict directly with the proposed site. At the time of writing there are no known planning applications which affect the site.

Highways

- 10.5 Suitable access should be provided off the A12 junction.

Landscape

- 10.6 All woodlands and wooded tracks (Historic Landscape Features) should be retained and a suitable stand-off distance maintained.

Historic Buildings

- 10.7 Proposals should adequately assess if there would be potential impacts upon Bentley Old Hall which is a Grade II* listed building and propose suitable mitigation if required. There are other listed buildings in the vicinity of the site that are considered not to be affected.

Archaeology

- 10.8 The land in question occupies a topographically favourable position for human occupation, between Orwell and Stour valleys, and is in area of archaeological potential as recorded by information held by the County Historic Environment Record (HER).

- 10.9 Cropmarks of extensive pre-modern field systems are recorded from the vicinity (BSD 005, BTY 003), whilst the line of a Roman road passes west of the proposed extraction site. Evidence indicative of Prehistoric occupation (BTY 008, BTY 009, BSD 012), is known from the vicinity, and the site is bordered by large areas of ancient woodland (BTY 020, BTY 023) which may conceal further earthwork evidence. In addition to the potential for near surface archaeological remains, the site includes sub-surface deposits of Quaternary date with potential for Palaeolithic archaeology and Pleistocene faunal remains.
- 10.10 An archaeological investigation will be required, which will include assessment of, and provide mitigation strategies for, near surface archaeological potential and Palaeolithic potential (at depth).

Ecology

- 10.11 Potential impacts upon nature conservation interest including hedgerows and damp ditches, Brockley and Old Hall Woods CWS, Ground Water Source Protection Zone, European Protected Species (Dormouse, Bats), Priority Species, other Protected Species and Protected Habitats need to be adequately assessed and where necessary mitigation proposed.

Air Quality

- 10.12 This site is predominantly agricultural land. It is anticipated that the site will commence operations in 2020 for approximately ten years.
- 10.13 Air Quality near the site is currently good; Babergh District Council has declared one Air Quality Management Area in Sudbury; however, this is >24km from the site. The closest AQMA, in Ipswich is almost 6km northeast of the site.
- 10.14 There are a number of residential properties within 250m of the site boundary/proposed access road (Including properties adjacent to London Road and on The Avenue), the closest being approximately 100m from the site boundary (Charity Cottage to the east of the site, and properties at the corner of Oakfield Road/ The Avenue to the north of the site).
- 10.15 There are no statutory designated habitats near to the site.
- 10.16 Access to the site will be directly from the A12. The number of HGV movements per day is not currently known, however, it is considered unlikely that additional traffic generated by the proposed extraction site will exceed the thresholds defined within IAQM/EPUK guidance, and therefore traffic emissions are unlikely to significantly increase local pollutant concentrations. However, should more than 100 HGVs be generated each day, an assessment of the air quality

impact of the additional traffic generated emissions should be included within the assessment.

10.17 It is expected that an Air Quality Assessment would be submitted with the planning application for the site which considers the potential impacts of increased dust and pollutant concentrations associated with the extraction process, and which defines the mitigation and monitoring which will be implemented at the site to minimise the identified risk of impacts at the identified nearby properties.

Noise

10.18 In addition to standard noise mitigation measures such as the use of earth bunds as barriers, standoff buffer areas may be required.

Public Rights of Way

10.19 There are a number of rights of way which cross the site that will require safeguarding or diverting.

Floods

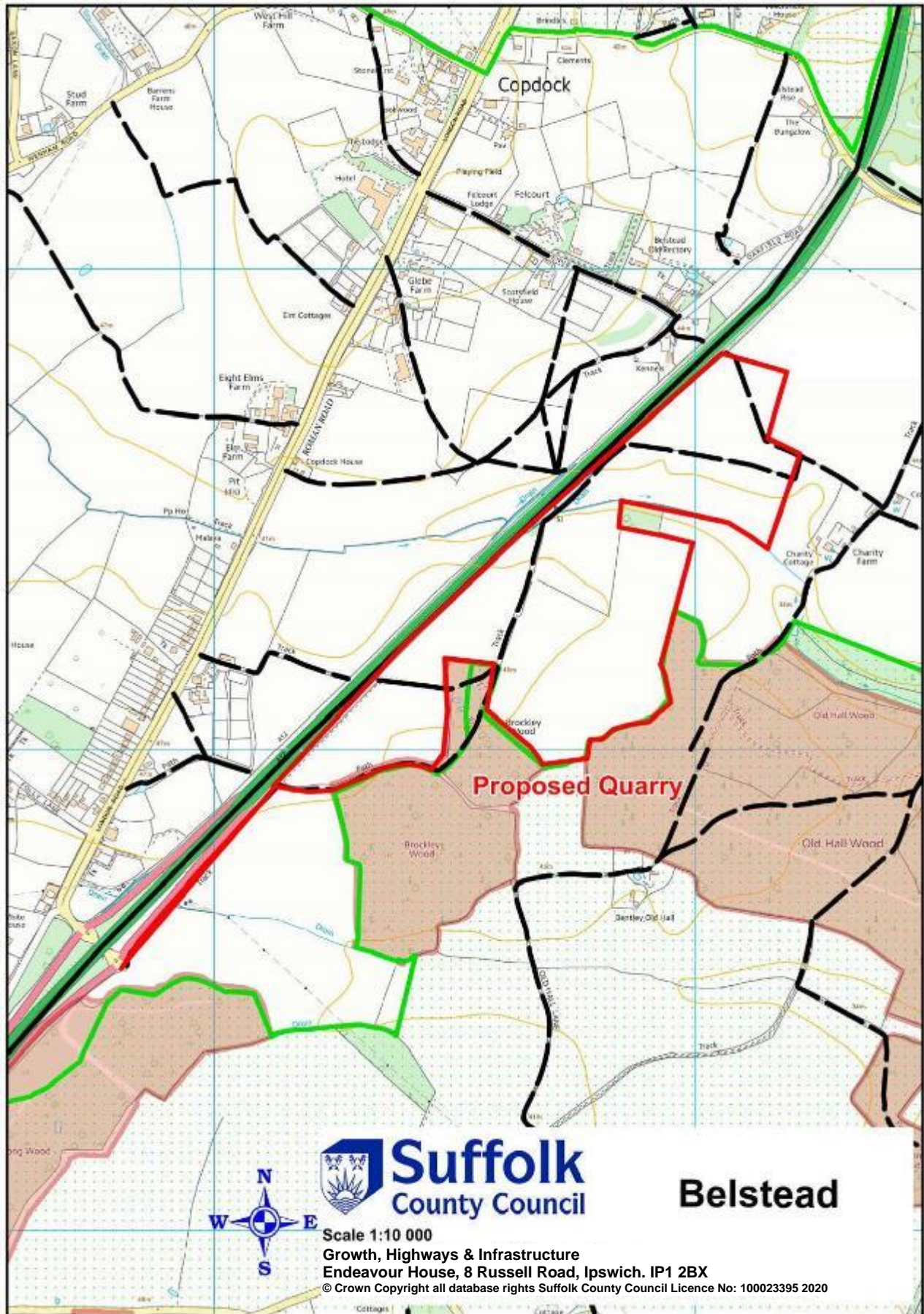
10.20 Proposals need to consider the potential implications for ground water resources and controlled waters.

Policy MS3: Belstead

Development will be acceptable so long as the proposals, adequately address the following:

- a) establishment of a quarry access onto the A12 and a traffic management plan drafted so as to avoid quarry traffic diverting through local villages including Copdock except in the case of local deliveries;
- b) safeguarding of all woodlands and wooded tracks;
- c) adequate mitigation of potential significant adverse impacts upon listed buildings and their settings within the vicinity of the site;
- d) the requirement for an archaeological investigation leading appropriate mitigation for near surface potential and Palaeolithic potential at depth;
- e) potential impacts upon nature conservation interest including hedgerows and damp ditches, Brockley and Old Hall Woods CWS, European Protected Species (Dormouse, Bats), Priority Species, other Protected Species and Protected Habitats;
- f) the provision of an air quality assessment which considers the potential impacts of increased dust and pollutant concentration associated with the extraction and infilling process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the site to minimise the risk at residential properties within 250m;
- g) the provision of measures to mitigate noise;
- h) proposals of the safeguarding or diverting of public rights of way, and;
- i) the implications for the underlying groundwater source protection zone and controlled waters.

Proposals must also be generally in accordance with other policies of the development plan including the environmental criteria set out in Policy GP4.



11. Cavenham

Proposed development

- 11.1 The proposed developments represent extensions to the existing long-standing sand and gravel quarrying operations at Cavenham Quarry which is operated by Allen Newport.
- 11.2 Currently sand and gravel is extracted and transported to the processing area by dump trucks. Once at the processing plant it is washed and sorted into different grades. It is then loaded onto lorries for transportation to various construction sites.
- 11.3 The established road access to the existing quarry utilises the C class roads to access the wider road network via the villages of Cavenham and Tuddenham St Mary. The roads are however part of Suffolk Lorry Route Network and are designated as Local Access Lorry Routes.
- 11.4 Middleton Aggregates currently operate an aggregates recycling area adjacent to the sand and gravel processing plant. Breedon Aggregates currently also operate an asphalt plant adjacent to the existing sand and gravel processing plant. In both cases using the existing access arrangements.
- 11.5 Originally the quarry started within the former World War II and Cold War Tuddenham Airfield. Extensions have since been dug to the north towards the River Lark. These proposals would extend the quarry to the south and west and bring them closer to the villages of Cavenham and Tuddenham St Mary.
- 11.6 Historically restoration has been designed to enhance habitat for the ground nesting Stone Curlew as the area is within a Special Protection Area.
- 11.7 Besides the proposed sand and gravel extraction there are proposals to infill part of the existing workings with inert waste materials (mainly soils and clays) and to consolidate the aggregates recycling area (that would remove any recyclable materials from imported inert waste materials).

Geology

- 11.8 The supporting geological evidence indicates that a total extractable resource of 3.545 Mt is contained within the site which covers 137.100 Ha. Although variable in depth and quality it is said to be similar to the existing deposit being worked at the quarry and on average is made up of 19% gravel, 74% sand and 7% silt.

Development Plan and Planning Applications

11.9 There are no Forest Heath District Council adopted or draft plan proposals which conflict with the proposed developments. There are no planning applications which conflict with the proposed developments.

Highways

11.10 The existing access arrangements are acceptable based on the existing flows.

Landscape

11.11 Likely to be acceptable subject to mitigation. Working and restoration proposals should take into account the potential impacts on the wider Special Landscape Area.

Historic Buildings

11.12 No historic buildings would be affected.

Archaeology

11.13 Evidence of prehistoric occupation is known from the vicinity. Archaeological investigations associated with previous phases of extraction have identified Neolithic and Bronze-Age occupation (CRM 003, CRM 018). Archaeological potential for later prehistoric and Roman occupation is indicated by surface finds scatters (CAM 014) and numerous metal detecting finds from the fields immediately south of the proposed extraction site. The site also has potential with regards to WWII military history, Tuddenham Airfield (TDD 019). There has been no systematic archaeological investigation of this large site.

11.14 The linear earthworks called Black Ditches to the east are a Scheduled Monument. Heritage England would require a significant buffer zone between the Monument and any restoration activities of the site. The restoration should seek to preserve and enhance the setting of the Scheduled Monument.

11.15 Any planning application must be supported by the results of a programme of archaeological evaluation, including appropriate fieldwork, and should demonstrate the impacts of development/extraction on archaeological remains, including deposits with Palaeolithic potential, and proposals for managing those impacts.

11.16 Archaeological field evaluation, and deposit modelling for Palaeolithic potential, will be required at an appropriate stage prior to the granting of any planning permission to allow for preservation in situ, where appropriate, of any sites of importance that might be defined (and which are currently unknown) and to allow archaeological preservation or mitigation strategies to be designed.

Ecology

11.17 Potential impacts upon nature conservation interest including Breckland SPA, Breckland SAC, Breckland Farmland SSSI, Ancient Woodland CWS, Cavenham Heath NNR, RNR, watercourses, European Protected Species

(Bats), Priority Species, Priority Habitats, Stone Curlew, Woodlark and Nightjar need to be adequately assessed and where necessary mitigation proposed.

Air Quality

11.18 This Site represents an extension to the existing quarry boundary and is currently agricultural land. Extraction could begin at the Site as early as 2020.

11.19 Air quality near the Site is currently good; the closest Air Quality Management Area is located approximately 13km southwest of the Site, in Newmarket.

11.20 There are a number of residential properties within 250m of the site. These include Mill Farm House, which is located approximately 170m from the eastern boundary (there is an existing barrier of trees between the quarry and this property).

11.21 The Site is encompassed by the Breckland Farmland SSSI and Breckland SPA. It also lies immediately adjacent to the Breckland SAC and Ickingham Heaths SSSI. Features sensitive to nitrogen deposition are identified by APIS for these sites.

Traffic associated with the proposed Site would continue to enter and leave the Site by the existing access point on Cavenham Road. The number of Heavy Goods Vehicles (HGVs) generated by the proposals is not currently known, as the full results of the geological investigations are not yet available from which this can be determined. It is considered unlikely that additional traffic generated by the proposed extraction site will exceed the thresholds defined within the IAQM / EPUK guidance, and therefore traffic emissions associated with this Site in isolation are unlikely to significantly increase local pollutant concentrations.

11.22 However, should more than 100 HGVs be generated each day, an assessment of the air quality impact of the additional traffic generated emissions should be included within the assessment.

11.23 There is a risk of cumulative impacts where extraction activities coincide with activities on the existing quarry Site.

11.24 It is expected that an air quality assessment would be submitted with the planning application for the extension which considers the potential impacts of increased dust and pollutant concentrations associated with the extraction

process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the site to minimise the identified risk of impacts at the identified habitats.

Noise

11.25 Assuming standard mitigation measures such as the use of earth bunds as barriers, no other noise mitigation measures are required.

Public Rights of Way

11.26 The Cavenham Byway Open should be retained on its definitive alignment and southern end should be fenced from the rest of the site

Floods

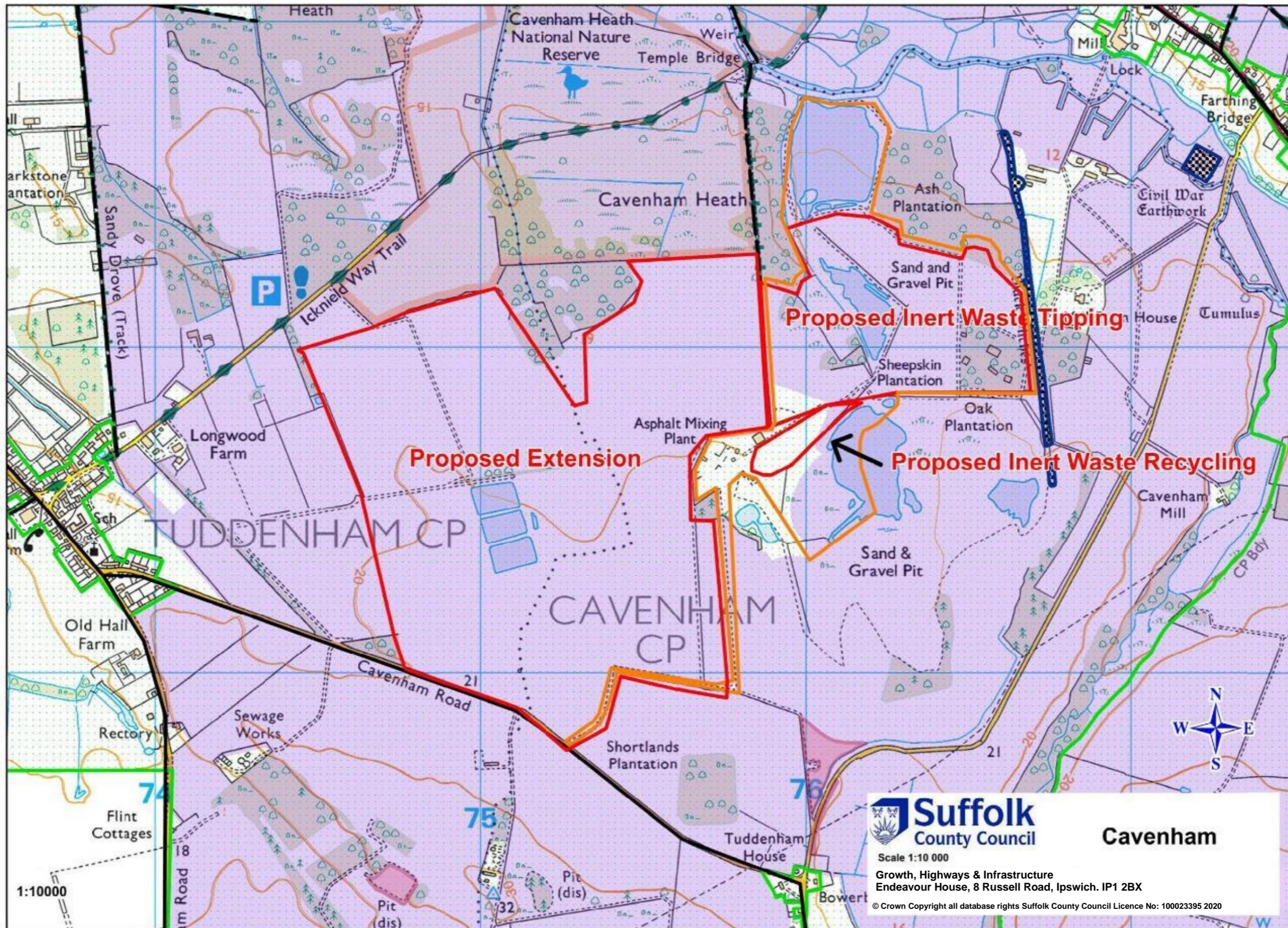
11.27 Proposals need to consider the potential implications for ground water resources and controlled waters. Groundwater Source Protection Zones are affected by this proposal.

Policy MS4: Cavenham

Development will be acceptable so long as the proposals, adequately address the following:

- a) highways maintenance, safety and amenity implications of HGVs;
- b) a phased restoration scheme appropriate to the Brecks Landscape and the Breckland Special Protection area;
- c) the requirement for an archaeological investigation leading appropriate mitigation for near surface potential and Palaeolithic potential at depth;
- d) the safeguarding of, and the preservation and enhance of the setting of, Black Ditches Ancient Monument;
- e) potential impacts upon nature conservation interest including Breckland SPA, Breckland SAC, Breckland Farmland SSSI, Ancient Woodland CWS, Cavenham Heath NNR, RNR, watercourses, European Protected Species (Bats), Priority Species, Priority Habitats, Stone Curlew, Woodlark and Nightjar including the provision of a project level Habitats Regulations Assessment, that would make clear the broad avoidance and/or mitigation measures and robust monitoring, identified at a strategic level that will be required and that restoration will ensure delivery of a net biodiversity gain long term, specifically with regard to the Breckland Special Protection Area;
- f) the provision of an air quality assessment which considers the potential impacts of increased dust and pollutant concentration associated with the extraction and infilling process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the site to minimise the risk at residential properties within 250m and to the Breckland Special Protection area;
- g) the provision of measures to mitigate noise;
- h) proposals of the safeguarding or diverting of public rights of way;
- i) no dewatering of the proposed extraction area;
- j) the implications for the underlying groundwater source protection zone and controlled waters of extraction and infilling;
- k) the implications for those parts of site within Flood Zone 2, and;
- l) the proposed enlarged inert waste recycling facility and the use of inert wastes to help restore the site.

Proposals must also be generally in accordance with other policies of the development plan including the environmental criteria set out in Policy GP4.



12. Layham

Proposed development

- 12.1 The proposed development represents an extension to the existing long-standing sand and gravel quarrying operations at Rands Hall Pit, Layham, which is operated by Brett.
- 12.2 The established road access uses the U8552 Rands Road to reach the reach the A1071, which is defined in the Suffolk Lorry Route Network as a Zone Distributor. The proposed site would involve quarry traffic crossing the U8504 Pope's Green Lane which however very lightly trafficked.
- 12.3 This site was previously included in the Suffolk Minerals Specific Site Allocations DPD, but no planning application was received due to the prevailing economic conditions.

Geology

- 12.4 The supporting geological evidence indicates that a total extractable resource of 0.829 Mt is contained within the site which covers 16.980 Ha. The deposit is made up of 23% coarse aggregates and 77% fine aggregate.

Development Plan and planning applications

- 12.5 There are no Babergh District Council adopted plan proposals that conflict with the proposed site. At the time of writing there are no known planning applications which affect the site.

Highways

- 12.6 The existing access arrangements are satisfactory.

Landscape

- 12.7 The resource is shallow and is capable of effective and sensitive mitigation without fill in this Special Landscape Area.

Historic Buildings

- 12.8 No historic buildings would be affected.

Archaeology

- 12.9 Evidence of low density and low complexity later prehistoric activity (LYM 034) has been identified by archaeological investigations undertaken in connection with previous phases of extraction, lying north of the proposed extension to

workings. A programme of archaeological work will be required, secured through a planning condition.

Ecology

12.10 There is the potential for impacts upon nature conservation interest including CWS including ancient woodland, European Protected Species (dormice, otters, bats, and great crested newts), priority species (BAP) and, priority habitats including hedgerows. Appropriate surveys and mitigation will be required.

Air Quality

12.11 Air quality near the Site is currently good; Babergh District Council has declared one Air Quality Management Area in Sudbury; however, this is >14km from the proposed site.

12.12 There are four residential properties within 250m of the extension site boundary; The Croft, Ivy Tree Cottage, Ivy Tree Farm and Wyncoll's Farm. A stand-off margin and planting / bunding are proposed to help mitigate the effects at these properties; additional dust suppression measures will also be defined.

12.13 It is estimated that the site will generate 150 HGV movements per day, which exceeds the threshold defined within the IAQM / EPUK guidance; there is a risk therefore that, where this traffic is additional to the existing quarry traffic, emissions would significantly increase local pollutant concentrations alongside routes taken by HGVs generated by the proposals.

12.14 There is a risk of cumulative impacts where extraction activities coincide with activities on the existing quarry site.

12.15 It is expected that an air quality assessment would be submitted with the planning application for the extension which considers the potential impacts of increased dust and pollutant concentrations associated with the extraction process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the site to minimise the identified risk of impacts at the identified properties.

Noise

12.16 In addition to standard noise mitigation measures such as the use of earth bunds as barriers, standoff buffer areas may be required.

Public Rights of Way

12.17 No Rights of Way affected.

Floods

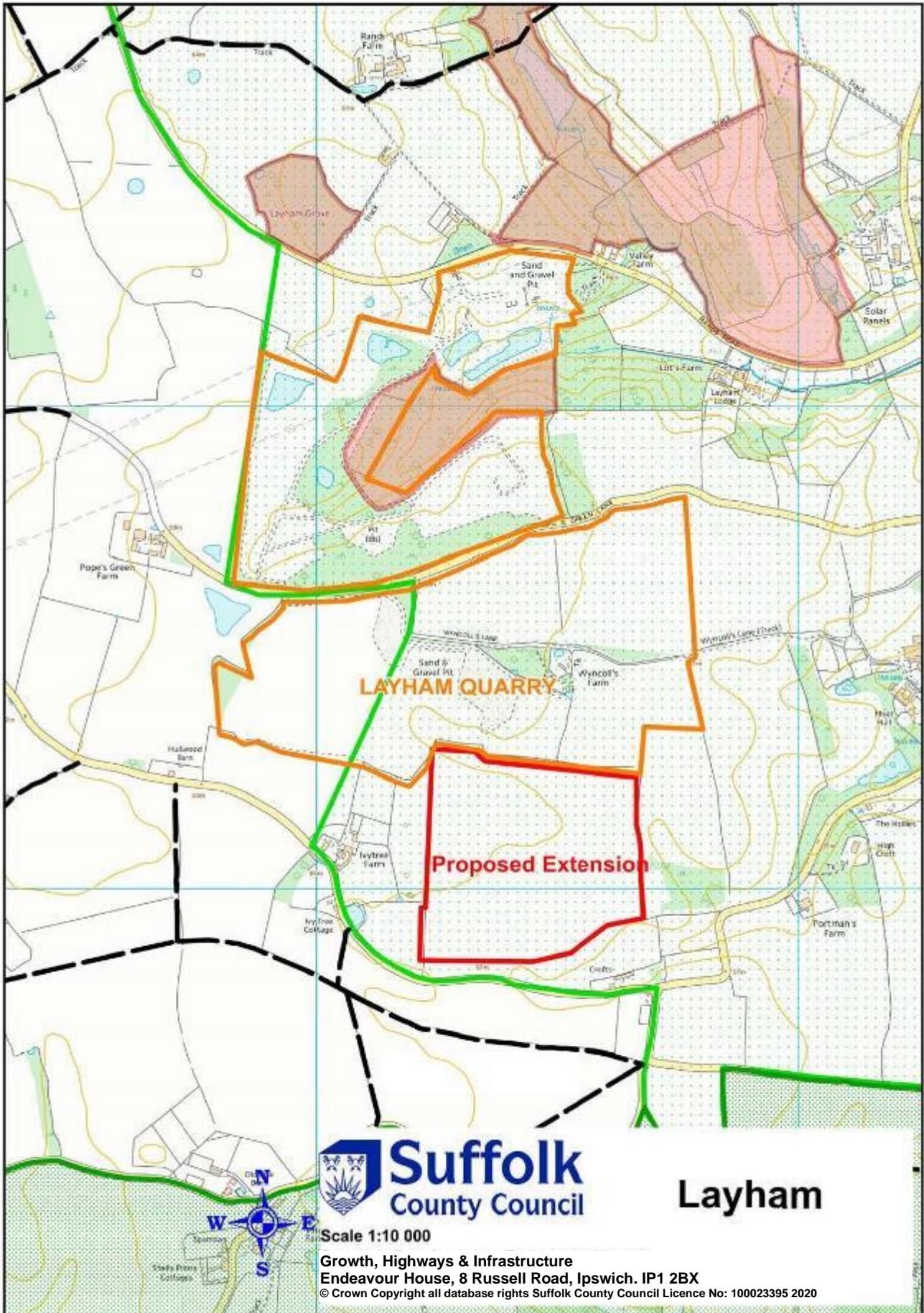
12.18 Proposals need to consider the potential implications for ground water resources and controlled waters.

Policy MS5: Layham

Development will be acceptable so long as the proposals, adequately address the following:

- a) a progressive working and low-level restoration scheme that is sympathetic to the wider Special Landscape Area and to the nearby Area of Outstanding Natural Beauty;
- b) protection of residential amenity;
- c) potential impacts upon nature conservation interest including CWS including ancient woodland, European Protected Species (dormice, otters, bats, and great crested newts), priority species (BAP) and, priority habitats including hedgerows. Appropriate surveys and mitigation will be required;
- d) the provision of an air quality assessment which considers the potential impacts of increased dust and pollutant concentration associated with the extraction and infilling process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the site to minimise the risk at residential properties within 250m;
- e) the provision of measures to mitigate noise, and;
- f) the implications for the underlying groundwater and controlled waters

Proposals must also be generally in accordance with other policies of the development plan including the environmental criteria set out in Policy GP4.



13. Tattingsstone

Proposed development

- 13.1 The proposed quarry extension was submitted on behalf of Shotley Holdings and proposes an extension to the area currently being quarried for sand. Restoration would involve the backfilling with inert waste (mainly soils and clays) to previous ground levels.
- 13.2 In the existing quarry sand is extracted in modest volumes on an annual basis and sold mainly for general fill. The subsequent void space is backfilled with dry not reactive waste hazardous waste, mainly asbestos.
- 13.3 The established road access to the site utilises the C426 to access the A137 which is classed as a Zone Distributor Lorry Route under the Suffolk Lorry Route Network.

Geology

- 13.4 The supporting geological evidence indicates that a total extractable resource of 0.756 Mt of is contained within the site which covers 3.798 Ha. Grading analysis of the deposit indicates that on average the deposit is made up of 4% gravel, 81% sand and 15% silt.

Development Plan and planning applications

- 13.5 There are no Babergh District Council adopted plan proposals that conflict with the proposed site. There are also no planning applications that affect the site at the time of writing.
- 13.6 It is noted however that Babergh District Council and Mid Suffolk District Council are currently preparing a joint local plan. Proposals for housing may be included close to the proposed extension area. Housing developers are advised that they should provide adequate mitigation in respect of the permitted sand quarry and waste operations and if the proposed extension has been permitted for that as well.

Highways

- 13.7 The existing access is adequate for the existing level of site traffic.

Landscape

- 13.8 Particular care is required when the removing of the established screen bunding as it could potentially open up views of the existing minerals extraction and waste landfilling and recycling operations to neighbouring properties and the wider Special Landscape Area.

Historic Buildings

13.9 No historic buildings would be affected.

Archaeology

13.10 There is evidence of prehistoric and medieval occupation (TAT 020) identified during archaeological investigations in association with the previous phases of extraction, immediately west of the proposed site. Cropmarks of linear and curvilinear ditches (TAT 004), probably representing at least two separate phases of relict field systems. There has been no systematic archaeological investigation of this large site. Potential for Palaeolithic remains associated with Kesgrave and Lowestoft formations.

13.11 Any planning application must be supported by the results of a programme of archaeological evaluation, including appropriate fieldwork, and should demonstrate the impacts of development/extraction on archaeological remains, including deposits with Palaeolithic potential, and proposals for managing those impacts.

13.12 Archaeological field evaluation, and deposit modelling for Palaeolithic potential, will be required at an appropriate stage prior to the granting of any planning permission to allow for preservation in situ, where appropriate, of any sites of importance that might be defined (and which are currently unknown) and to allow archaeological preservation or mitigation strategies to be designed.

Ecology

13.13 There are potential impacts upon nature conservation interest including Stour & Orwell SPA, Stour Estuary SSSI, Brantham Bridge Meadows CWS, watercourses, European Protected Species (Bats), Priority Species, Priority Habitats, that need to be adequately assessed and where necessary mitigation proposed.

Air Quality

13.14 The Site is currently agricultural land. It is anticipated that the Site could be operational by 2025/30. The estimated life of the Site is twenty-three years.

13.15 Air quality near the Site is currently good; the closest Air Quality Management Area is located over 8km northeast of the Site, in Ipswich.

13.16 There are a number of residential properties within 250m of the eastern Site boundary, including properties adjacent to the A137. Folly Farm House also lies approximately 225m from the southwest corner of the Site boundary. This

property also lies within 200m of the southern boundary of the existing Folly Farm Quarry. A 'standoff' buffer is indicated on drawings along the eastern boundary of Phase 1, within which a soil storage / screening bund is proposed. Phase 2 is screened along the eastern boundary by existing trees.

- 13.17 There are no statutory designated habitat sites within 250m of the extension Site boundary.
- 13.18 Access to the Site would be via the existing quarry access roads. The number of HGVs generated by the proposals will be similar to that generated by the existing quarry. It is considered unlikely that additional traffic generated by the proposed extraction site will exceed the thresholds defined within the IAQM / EPUK guidance, and therefore traffic emissions are unlikely to significantly increase local pollutant concentrations.
- 13.19 There is a risk of cumulative impacts where extraction activities coincide with activities on the existing quarry Site.
- 13.20 It is expected that an air quality assessment would be submitted with the planning application for the extension which considers the potential impacts of increased dust and pollutant concentrations associated with the extraction process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the Site to minimise the identified risk of impacts at the identified receptors.

Noise

- 13.21 In addition to standard noise mitigation measures such as the use of earth bunds as barriers, standoff buffer areas may be required.

Floods

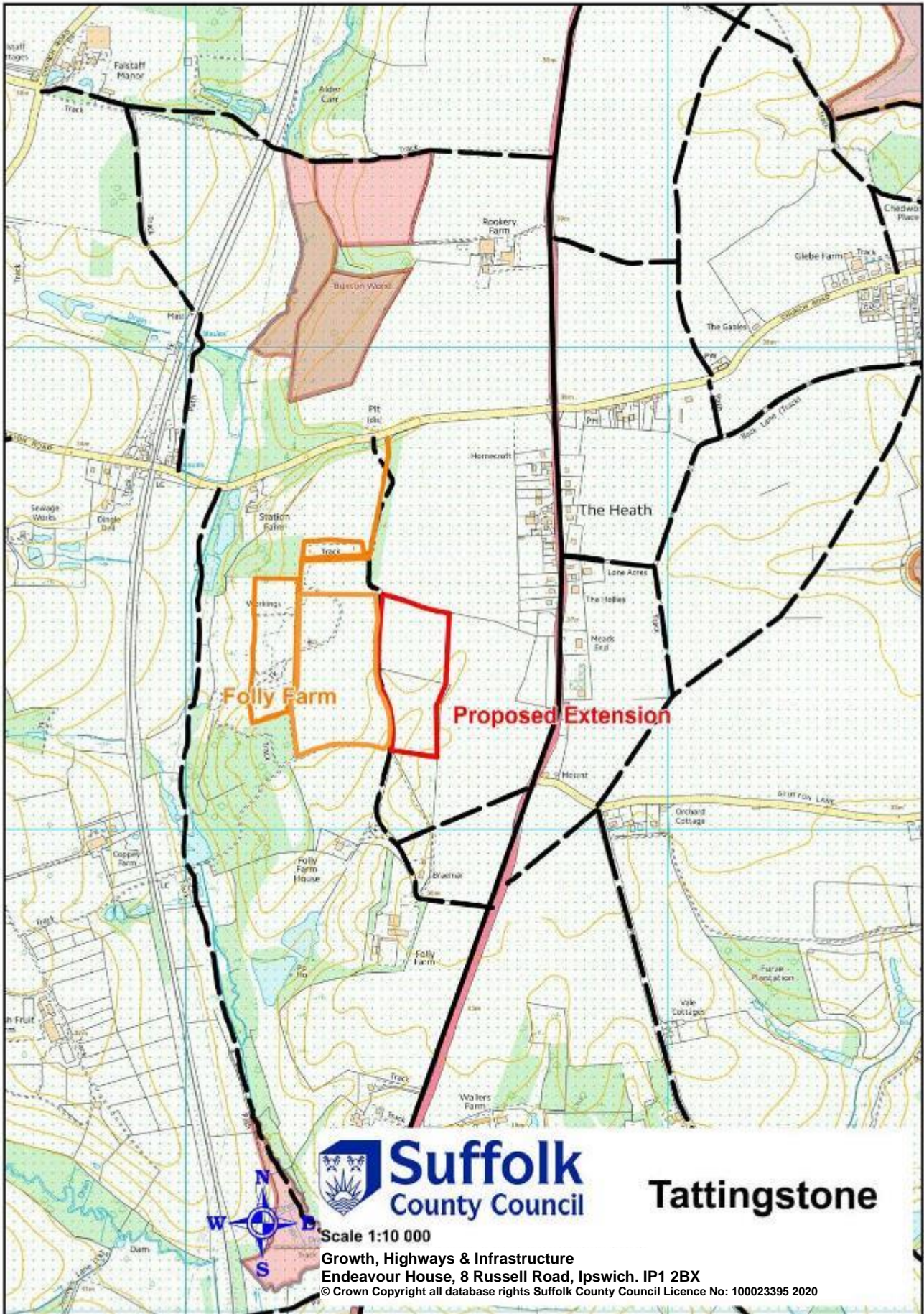
- 13.22 No significant risk but need to be mindful of the watercourse that runs through the site.

Policy MS6: Tattingstone

Development will be acceptable so long as the proposals, adequately address the following:

- a) the highways safety, maintenance and amenity implications of HGVs;
- b) a comprehensive scheme of screening and bunding for the proposed extension is essential to minimise adverse impacts of the wider landscape of the Special Landscape Area, Area of Outstanding Natural Beauty including the proposed extension area and on local visual amenity;
- c) an archaeological field evaluation, and deposit modelling for Palaeolithic potential, prior to the granting of any planning permission to allow for preservation in situ, where appropriate, of any sites of importance that might be defined (and which are currently unknown) and to allow archaeological preservation or mitigation strategies to be designed;
- d) potential impacts upon nature conservation interest including trees, ditches, watercourses, the Stour & Orwell Special Protection Area, European Protected Species (Bats), Priority Species, Priority Habitats, which need to be adequately assessed and where necessary mitigation proposed;
- e) the provision of an air quality assessment which considers the potential impacts of increased dust and pollutant concentration associated with the extraction and infilling process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the site to minimise the risk at residential properties within 250m;
- f) the provision of measures to mitigate noise;
- g) the diversion of Bridleway 37A and Footpath 37 and;
- h) the implications for the underlying groundwater and controlled waters including the stream that runs through the site.

Proposals must also be generally in accordance with other policies of the development plan including the environmental criteria set out in Policy GP4.



14. Wetherden

Proposed development

- 14.1 The proposed extension to Wetherden Quarry was submitted on behalf of Aggmax and proposes an extension to the area currently being quarried for sand and gravel. Restoration would involve the backfilling with inert waste (mainly soils and clays) to previous ground levels.
- 14.2 This would follow the existing pattern in the existing quarry where sand and gravel is extracted and processed and the subsequent void space backfilled with inert wastes
- 14.3 The established road access to the site utilises the U4977 which is classed as a Local Access Lorry Route under the Suffolk Lorry Route Network to access the A14. When travelling to and from the east, quarry traffic passes through the village of Haughley New Street.

Geology

- 14.4 The supporting geological evidence indicates that a total extractable resource of 0.750 Mt of is contained within the site which covers 6.207 Ha. Grading analysis of the deposit indicates that on average the deposit is made up of 27% gravel (including oversize), 65% sand and 8% silt.

Development Plan and Planning Applications

- 14.5 There are no Mid Suffolk District Council adopted plan proposals that conflict with the proposed site.
- 14.6 It is noted however that Babergh District Council and Mid Suffolk District Council are currently preparing a joint local plan. It is noted that the Plan may include an area of housing between the existing settlement of Elmswell and the Quarry. The same area has already been the subject of an outline planning application for residential development which has been approved.
- 14.7 Housing developers are advised that they should provide adequate mitigation in respect of the permitted sand and gravel quarry and waste operations.

Highways

- 14.8 Improved wheel cleaning at the site is required.

Landscape

- 14.9 Mitigation should include a screening belt of trees should be planted along the western flank of the existing quarry and proposed extension.

Historic Buildings

14.10 No historic buildings would be affected.

Archaeology

14.11 There is evidence of low density and low complexity prehistoric and Roman activity (WDN 013, WDN 002, WDN 011, EWL 004) has been identified by archaeological investigations undertaken in connection with previous phases of extraction, lying south of the proposed extension to workings. In addition, several ovens/kilns of Roman date, were identified at evaluation, ahead of development on a site immediately north of the proposed extension.

14.12 A programme of archaeological work will be required, secured through a planning condition

14.13 Planning conditions must secure a programme of archaeological investigation, which will include assessment of, and provide mitigation strategies for, near surface archaeological potential and Palaeolithic potential (at depth).

Ecology

14.14 Potential impacts upon watercourses, European Protected Species, Priority Species, Priority Habitats, to be adequately assessed and where necessary mitigation proposed.

Air Quality

14.15 A northern extension is proposed to the existing quarry boundary; the Site is currently agricultural land. Operation of the Site is anticipated to commence as early as 2018/2020, with an operational life of between seven and ten years.

14.16 Air quality near the Site is currently good; there are no Air Quality Management Areas currently declared by Mid Suffolk District Council.

14.17 There are a number of residential properties to the north of the Site which lie within 250m of the extension site boundary (properties on Mill Gardens and Prescott Drive); the closest property is Warren Mill House, which is approximately 100m from the extension boundary. This property is no closer to the extension boundary than it is to the existing quarry boundary, and a bund is already in place to separate the property from the extraction activities.

14.18 A 'standoff' buffer is indicated on drawings, within which screening bunds could be installed as mitigation, if required. This buffer is wider along the north, east and west boundaries. and would increase the separation distance between works and the identified residential properties.

14.19 There are no statutory designated habitats near to the Site.

14.20 Access to the Site would be via the existing quarry access roads. The Site is estimated to generate 60 HGV movements per day; this remains below the thresholds defined within the IAQM / EPUK guidance, and therefore traffic emissions are unlikely to significantly increase local pollutant concentrations.

14.21 There is a risk of cumulative impacts where extraction activities coincide with activities on the existing quarry Site.

14.22 It is expected that an air quality assessment would be submitted with the planning application for the extension which considers the potential impacts of increased dust and pollutant concentrations associated with the extraction process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the extension site to minimise the identified risk of impacts at the identified properties.

Noise

14.23 Assuming standard mitigation measures such as the use of earth screening additional stand-off buffers are required.

Public Rights of Way

14.24 There is an extensive network of well used public rights of way that would be affected by this proposal and proposals should include detailed mitigation.

Floods

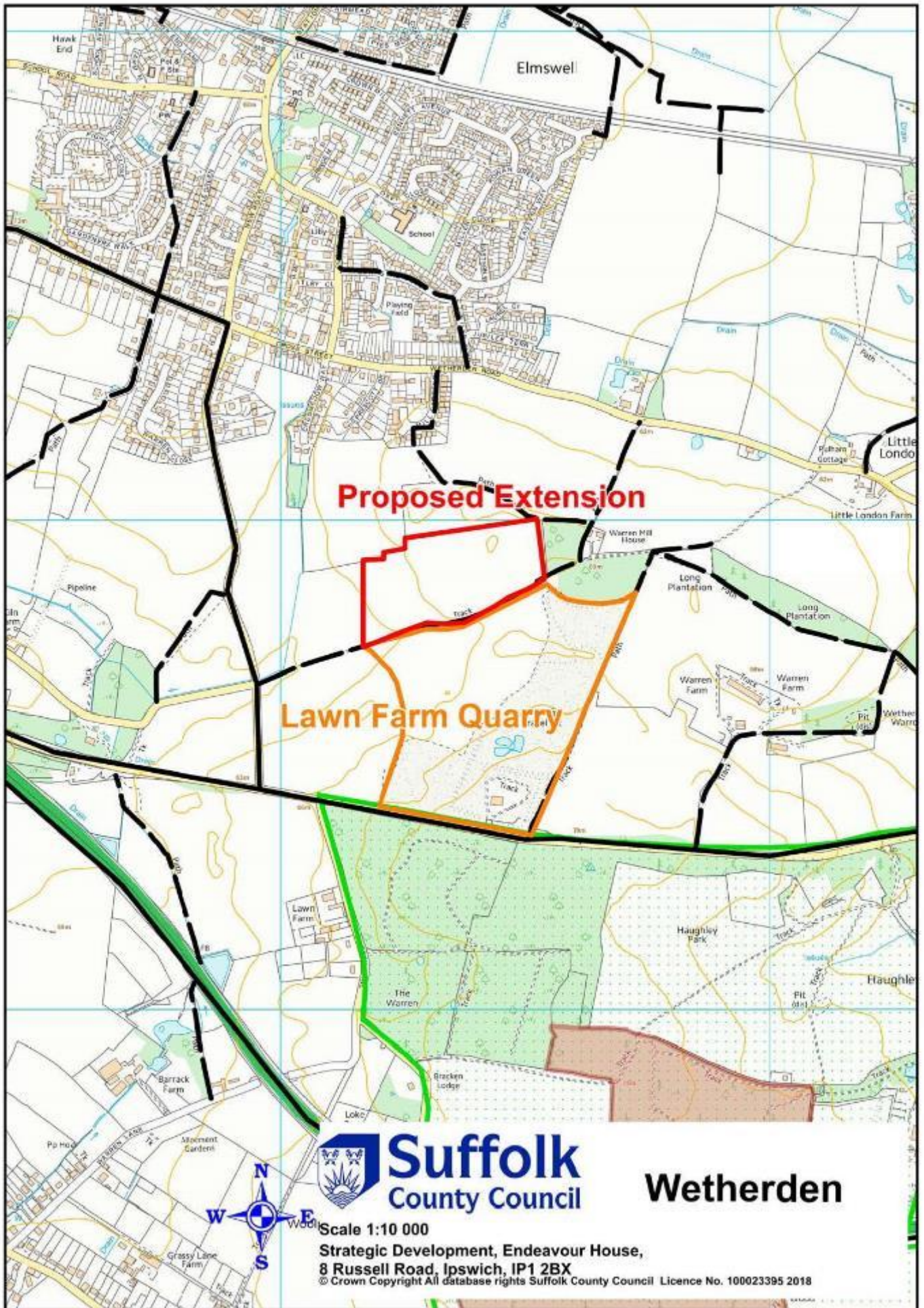
14.25 There is no significant risk, but the site is within a Groundwater Source Protection Zone.

Policy MS8: Wetherden

Development will be acceptable so long as the proposals, adequately address the following:

- a) the highways safety, maintenance and amenity implications of HGVs including improved wheel cleaning facilities to avoid mud being deposited on the public highway outside of the site;
- b) mitigation of landscape and visual impacts through a scheme of planting along the western flank of the existing quarry and proposed extension;
- c) a programme of archaeological investigation, which will include assessment of, and provide mitigation strategies for, near surface archaeological potential and Palaeolithic potential (at depth).
- d) potential impacts upon hedgerows, ditches, watercourses, European Protected Species, Priority Species, and Priority Habitats;
- e) the provision of an air quality assessment which considers the potential impacts of increased dust and pollutant concentration associated with the extraction and infilling process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the site to minimise the risk at residential properties within 250m;
- f) the provision of measures to mitigate noise;
- g) proposals to mitigate the impacts upon the existing rights of way network;
- h) the implications for the underlying groundwater and controlled waters and;
- i) a traffic management plan drafted to avoid traffic routeing through local villages including Elmswell and Wetherden except in the case of local deliveries.

Proposals must also be generally in accordance with other policies of the development plan including the environmental criteria set out in Policy GP4.



15. Wherstead

Proposed development

- 15.1 The proposed development represents an extension to the permitted sand and gravel quarrying operations at Pannington Hall Quarry, Wherstead, which is operated by Brett. Planning permission was granted a number of years ago, implemented and also renewed recently. The quarry is however currently dormant due to Brett concentrating activities at another site which is coming to an end. Some inert waste materials might be required to aid restoration.
- 15.2 The permitted access is directly onto the A137, which is defined in the Suffolk Lorry Route Network as a Zone Distributor. The existing site is bisected by the C453 Belstead road, the intention is that the two parts of the site would be linked by a conveyor under the road.
- 15.3 This proposed extension site is adjacent to the main southern part of the site without the need to cross a public highway.

Geology

- 15.4 The supporting geological evidence indicates that a total extractable resource of 0.500 Mt is contained within the site and is made up of superficial glacial sand and gravel deposits of the Lowestoft Formation and the Kesgrave Catchment Subgroup. The extension is considered to be geologically similar to the existing site and covers 10.920 Ha.

Development Plan and planning applications

- 15.5 There are no Babergh District Council adopted plan proposals that conflict with the proposed site. At the time of writing there are no known planning applications which affect the site.

Highways

- 15.6 The existing approved access is adequate.

Landscape

- 15.7 Significant stand off from adjacent ancient woodland required.

Historic Buildings

- 15.8 No historic buildings would be affected.

Archaeology

- 15.9 There is evidence indicative of prehistoric, Roman and Medieval occupation is recorded from the vicinity, on the County Historic Environment Record (HER). Cropmarks of extensive field boundaries, a trackway and ditches have been identified by aerial photography across the proposed site (WHR 078).
- 15.10 The British Geological Survey records the presence of Kesgrave (Proto-Thames) and Anglian deposits, which have potential for Lower Palaeolithic faunal, environmental and possible artefactual remains. Deposit modelling is needed to determine the level of this potential across the site.
- 15.11 A programme of archaeological work will be required, secured through a planning condition, which will include assessment of, and provide mitigation strategies for, near surface archaeological potential and Palaeolithic potential (at depth).

Ecology

- 15.12 Potential impacts upon nature conservation interest including Freston and Cutler's Wood SSSI, CWS ancient woodland, Ground Water Source Protection Zone, European Protected Species (dormice and bats), priority species (BAP) and habitats, and another protected species. Appropriate surveys and mitigation will be required.

Air Quality

- 15.13 Air quality near the Site is currently good; the closest Air Quality Management Area is located approximately 4.5km northeast of the Site, in Ipswich.
- 15.14 There are no residential properties nor any statutory designated habitat sites within 250m of the extension Site boundary.
- 15.15 It is estimated that the Site will generate 150 HGV movements per day, which exceeds the threshold defined within the IAQM / EPUK guidance; there is a risk therefore that, where this traffic is additional to the existing quarry traffic, emissions would significantly increase local pollutant concentrations alongside routes taken by HGVs generated by the proposals. It is understood that extraction will follow on from the permitted workings, and therefore this is unlikely to be the case.
- 15.16 There is a risk of cumulative impacts where extraction activities coincide with activities on the existing quarry Site (however, this is understood not to be the case).

15.17 The proposals currently include consideration of additional screening / bunding, dust suppression measures and maintenance of on-site plant. It is anticipated that mitigation measures will be further defined and implemented at the site to minimise the impact on air quality in the wider area.

Noise

15.18 Assuming standard noise mitigation measures such as the use of earth bunds as barriers, no other noise mitigation measures are required.

Public Rights of Way

15.19 Bridleway no. 27 and 29 Wherstead are shown adjacent to a proposed boundary. Boundaries should be so arranged to ensure bridleway is unobstructed. A good wide corridor should be retained for the bridleway of 5 metres minimum width. If the site boundaries are bunds, this should be 10m wide. Public Footpath no. 34 is affected and will run partly within the site. This would need to be temporarily diverted with a minerals order to follow the boundary alignment. The width would need to be 3 metres.

Floods

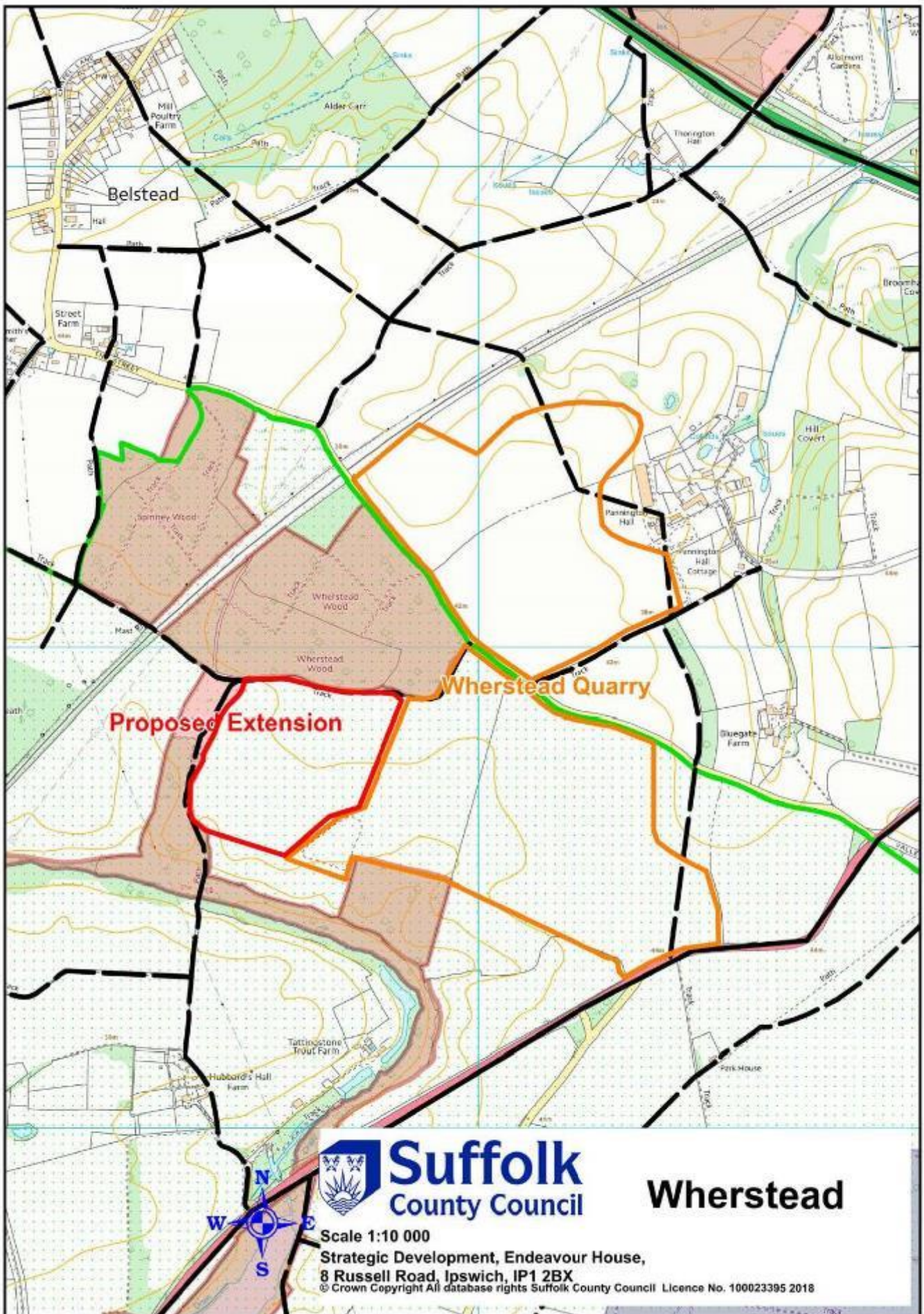
15.20 Proposals need to consider the potential implications for ground water resources and controlled waters.

Policy MS9: Wherstead

Development will be acceptable so long as the proposals, adequately address the following:

- a) mitigation of landscape and visual impacts including upon the Special Landscape and the nearby proposed extension to the Area of Outstanding Natural Beauty;
- b) a programme of archaeological investigation, which will include assessment of, and provide mitigation strategies for, near surface archaeological potential and Palaeolithic potential (at depth).
- c) potential impacts upon nature conservation interest including hedgerows, ditches, Freston and Cutler's Wood SSSI, CWS ancient woodland, European Protected Species (dormice and bats), priority species (BAP) and habitats, and another protected species;
- d) the retention of the boundary between the existing site and the proposed extension including the mature oak trees and the recently planted trees;
- e) proposals to minimise the impact upon air quality in the wider area;
- f) proposals to mitigate the impacts upon the existing rights of way network;
- g) the implications for the underlying groundwater and controlled waters including the potential impacts on Ground Water Source Protection Zone, and;
- h) a traffic management plan drafted to avoid traffic diverting through local villages including Belstead except in the case of local deliveries.

Proposals must also be generally in accordance with other policies of the development plan including the environmental criteria set out in Policy GP4.



16. Worlington

Proposed development

- 16.1 The proposed developments represent extensions to the permitted sand and gravel quarrying operations at Bay Farm, Worlington, which is operated by Frimstone. The proposed sites would follow the existing pattern of development whereby the sand and gravel is extracted and the land restored by utilising the importation of inert waste materials. The proposed extensions include three areas to the north of the existing quarry.
- 16.2 The permitted access is directly onto the B1085 Elms Road which links to the A11 via a grade separated junction close by.

Geology

- 16.3 The supporting geological evidence indicates that a total extractable resource of 0.670 Mt is contained within the site which covers 23.161 Ha. The quality it is said to be similar to the existing deposit being worked at the quarry.

Development Plan and planning applications

- 16.4 There are no Forest Heath District Council adopted plan proposals that conflict with the proposed site. At the time of writing there are no known planning applications which affect the site.

Highways

- 16.5 The existing access is considered to be adequate.

Landscape

- 16.6 Proposals should preserve the locally characteristic tree belts where possible.

Historic Buildings

- 16.7 No historic buildings would be affected.

Archaeology

- 16.8 A program of archaeological investigation will be required, which will include assessment of, and provide mitigation strategies for, near surface archaeological potential and Palaeolithic potential (at depth).

- 16.9 Evidence of low density and low complexity prehistoric activity (WGN 028, WGN 034, WGN 038) has been identified by archaeological investigations undertaken in connection with previous phases of extraction, lying south of the proposed extensions. The site of a probable BA burial mound, “Swale’s Tumulus” (WGN 003) lies approximately 100m NE. Significant quantities of Neolithic pottery and burnt bone have been found in association with this feature (WGN 003).

Ecology

- 16.10 Potential impacts upon nature conservation interest including Breckland SPA, Breckland SAC, Breckland Flora CWS, Ground Water Source Protection zone, European Protected Species, Other Protected Species, and Priority Habitats. Surveys and potential mitigation required.

Air Quality

- 16.11 This Site represents an extension to the existing quarry boundary and is currently agricultural land. Extraction could begin in 2018 and last for seven years.
- 16.12 Air quality near the Site is currently good; the closest Air Quality Management Area is located approximately 9.4km southwest of the Site, in Newmarket.
- 16.13 There are no residential properties nor statutory designated habitat sites within 250m of extension site boundaries.
- 16.14 Traffic associated with the proposed Site would continue to enter and leave the site by the existing access point. The site will be worked once extraction from the current phases is completed, and traffic movements will be similar to the existing quarry. Therefore, there will be no material change from existing flows, and traffic emissions are unlikely to increase local pollutant concentrations.

Noise

- 16.15 Assuming standard mitigation measures such as the use of earth screening bunds as barriers, no other noise mitigation measures are required.

Public Rights of Way

- 16.16 No public rights of way would be directly affected.

Floods

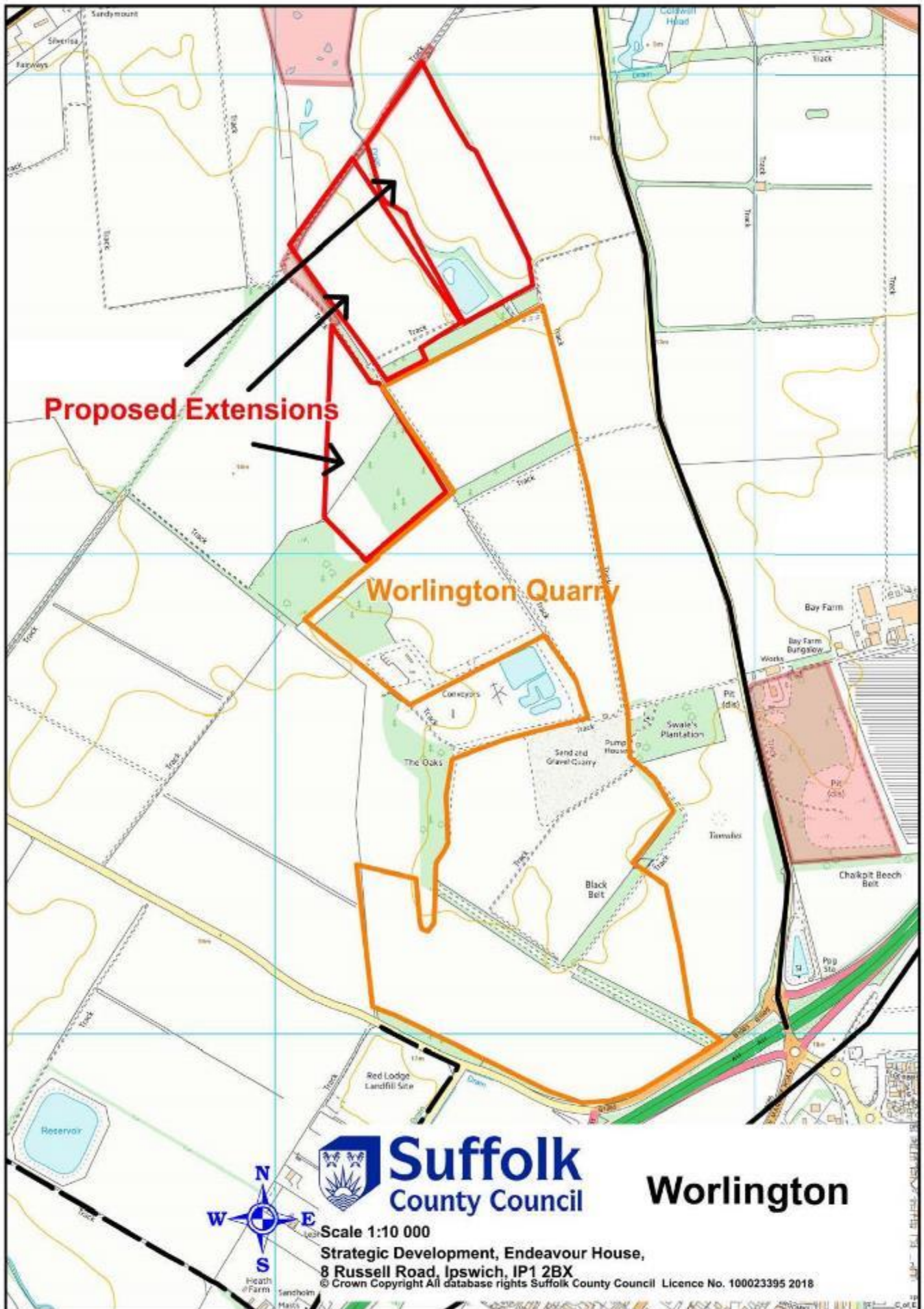
- 16.17 The site sits above Principle and Secondary Aquifers. Ordinary watercourse between extension areas should not be adversely affected by works in terms of water quality (pollution).

Policy MS10: Worlington

Development will be acceptable so long as the proposals, adequately address the following:









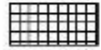


- a) mitigation of landscape and visual impacts including the retention where possible of the characteristic tree belts;
- b) a programme of archaeological investigation, which will include assessment of, and provide mitigation strategies for, near surface archaeological potential and Palaeolithic potential (at depth);
- c) potential impacts upon nature conservation interest including Breckland SPA, Breckland SAC, Breckland Flora CWS, European Protected Species, Other Protected Species, and Priority Habitats;
- d) the provision of measures to mitigate noise, and;
- e) the implications for the underlying groundwater, controlled waters and the local water environment, including the potential impacts on Ground Water Source Protection Zone.

Proposals must also be generally in accordance with other policies of the development plan including the environmental criteria set out in Policy GP4.



17. Proposed waste sites

17.1 The following inset maps show the proposed sites for proposed waste development.

Key	
	Proposed Site
	Existing Site
	Statutory Landscape Designation (One of the following) -Area of Outstanding Natural Beauty -Norfolk & Suffolk Broads
	Non-Statutory Landscape Designation -Special Landscape Area
	Statutory Ecological Designation (One or more of the following) -Site of Special Scientific Interest -Special Protection Area -Special Area of Conservation -Ramsar Wetlands -National Nature Reserves -Local Nature Reserves
	Non- Statutory Ecological Designation -County Wildlife Site
	Suffolk Lorry Route Network
	Rights of Way
	Historic Parks and Gardens
	Conservation Area
	Scheduled Monument

18. Sizewell 'A' Nuclear Power Station

Proposed development

- 18.1 Sizewell 'A' generated electricity for forty years between 1966 and 2006.
- 18.2 This Plan proposal relates to the management of waste arising from the decommissioning of Sizewell 'A' together with other waste from sister stations in accordance with national policy to share waste facilities. It is important to note that Sizewell 'A' is already benefiting from sharing waste management facilities at Bradwell Nuclear Power Station in Essex. Whilst there are no such proposals at the present time to share facilities at Sizewell it is considered prudent to have policies in place if such a proposal is put forward in the future.
- 18.3 Lorries would access from the A12, which is classified as a Strategic Lorry Route in the Suffolk Lorry Route Network, via the B1122 which is classified as a Zone Distributor Lorry Route, and then onto the U2822 Lovers Lane and then onto the C228, which are classified as a Local Access Lorry Routes, before reaching the site access road.
- 18.4 The site is also rail linked although this is not currently used. The area of the site as included is 13.02 ha.

Development Plan and planning applications

- 18.5 There are no East Suffolk Council adopted or draft plan proposals that conflict with the proposed site. At the time of writing there are no known planning applications which affect the site

Highways

- 18.6 The existing access is considered adequate.

Landscape

- 18.7 Justification would be required for further development with the Suffolk Coasts & Heaths Area of Outstanding Natural Beauty (AONB).

Historic Buildings

- 18.8 No historic buildings would be affected.

Archaeology

- 18.9 The site is within an area of archaeological potential identified through information held on the County Historic Environment Record (HER). The vast majority of the site has been heavily disturbed by its current usage. However, there are islands of potentially undisturbed land, notably Hill Wood and the car park in the SE corner. It is possible that excavation to provide storage facilities in this area may require archaeological mitigation.
- 18.10 Proposed development within unaffected areas will require planning conditions to secure a programme of archaeological investigation, which will include assessment of, and provide mitigation strategies for, near surface archaeological potential, including Palaeolithic/ paleo-environmental potential.

Ecology

- 18.11 Potential impacts upon nature conservation interest including Suffolk Coasts & Heaths AONB need to be adequately assessed and where necessary mitigation proposed.

Air Quality

- 18.12 The Sizewell 'A' nuclear facility is currently in the process of decommissioning following its shut down in 2006. The process involves the treatment and storage of radioactive waste. The site has an Environmental Management Plan 2016/17 (May 2016) which includes mitigation measures relating to air quality and dust.
- 18.13 Air Quality near the site is currently good; Suffolk Coastal District Council have declared three Air Quality Management Areas, the closest of which is over 12km west of the proposed site. Sizewell Marshes SSSI is located approximately 35m from the site boundary at the closest point.
- 18.14 It is considered unlikely that any additional traffic generated by the decommissioning process (which is already underway) will exceed the thresholds defined within the IAQM/EPUK guidance, and therefore traffic emissions are unlikely to significantly increase local pollutant concentrations.

Noise

- 18.15 The site Environmental Management Plan includes mitigation measures relating to noise and vibration.
- 18.16 It is considered unlikely that any additional future traffic generated by the decommissioning process (which is already underway) will cause significant changes in noise at sensitive locations.

Public Rights of Way

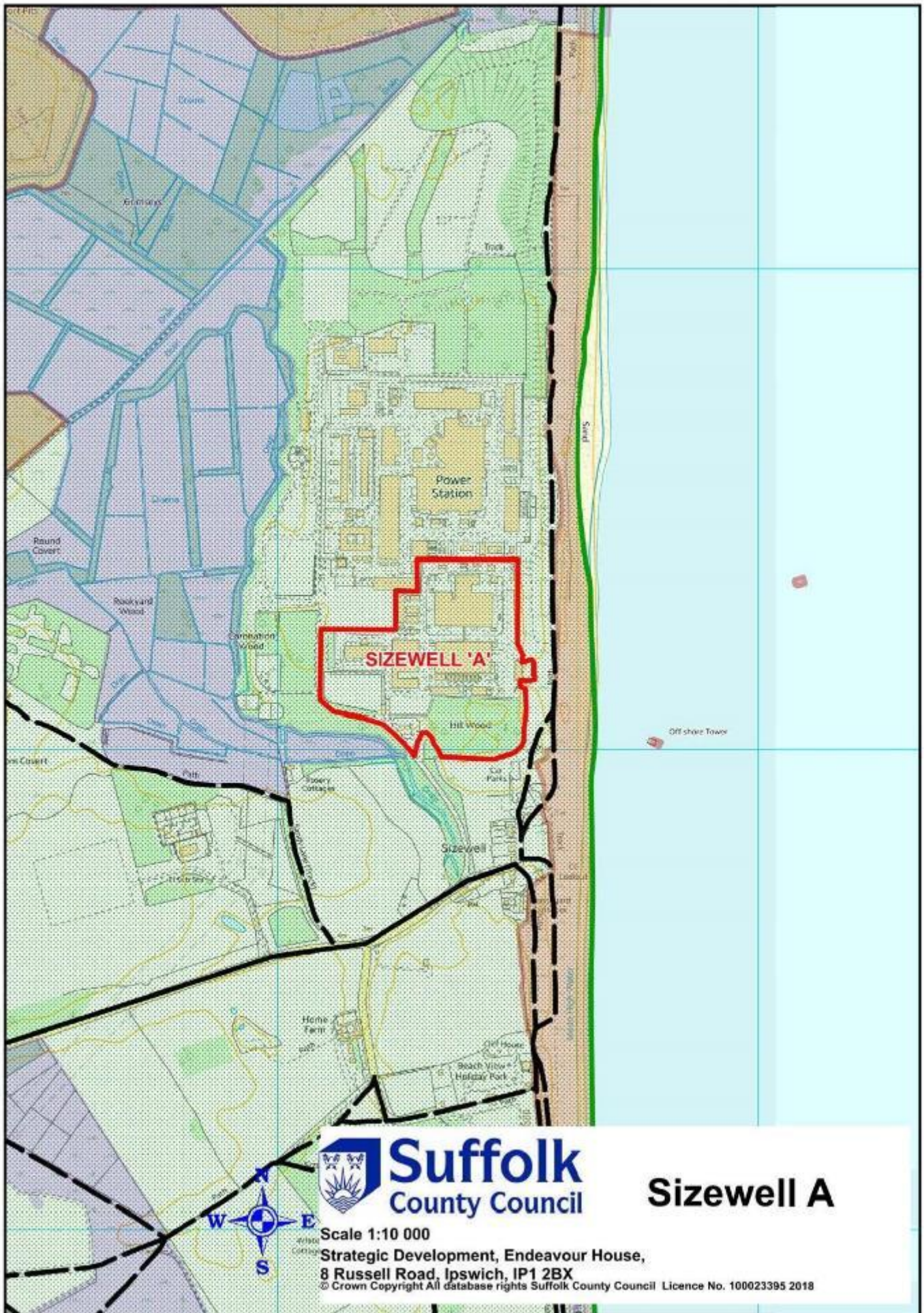
18.17 Proposals should exclude the beach area including the public footpath unless there is an overriding need.

Policy WS1: Sizewell 'A' Nuclear Power Station

Proposals for the management of waste arising from the decommissioning of Sizewell 'A', together with other waste from sister stations in accordance with the national policy to share waste facilities, will be acceptable so long as the proposals, adequately address the following:

- a) a programme of archaeological investigation if the proposed development is located on an area of previously undisturbed land, which will include assessment of, and provide mitigation strategies for, near surface archaeological potential and Palaeolithic potential (at depth);
- b) likely adverse impacts (either individually or in combination with other developments) on the notified special interest features of Sizewell Marshes SSSI, Suffolk Shingle Beaches CWS, Minsmere-Walberswick Heaths & Marshes SSSI, Minsmere-Walberswick SPA/Ramsar, Sandlings SPA, Leiston-Aldeburgh SSSI, on European and UK protected species, UK priority species, and the preservation of the flora and fauna associated with the established sand dunes on Sizewell beach including protect species such as Adders, unless there is an overriding need;
- c) detailed assessment of the impacts on the special qualities of the Suffolk Coasts & Heaths AONB and on the Suffolk Heritage Coast, and demonstration of the exceptional circumstances that justify development within the AONB;
- d) mitigation of identified landscape and visual impacts and reinstatement which is in keeping with the local landscape character;
- e) the preservation of the existing public rights of way on Sizewell beach unless there is an overriding need;
- f) the safeguarding of existing pylons, and;

Proposals must also be generally in accordance with other policies of the development plan including the environmental criteria set out in Policy GP4.



 **Suffolk**
County Council

Sizewell A

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