

Suffolk Minerals & Waste Local Plan Sustainability Appraisal Post-Adoption Statement

AUGUST 2020





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List of Acronyms

AD	Anaerobic Digestion
ALC	Agricultural Land Classification
AONB	Areas of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BAP	Biodiversity Action Plan
BARR	Buildings At Risk Register
Bq	Becquerel
C, D & E Waste	Construction, demolition and excavation waste
CH&P	Combined Heat and Power
C&I waste	Commercial and Industrial waste
CWS	County Wildlife Site
DCLG	Department for Communities and Local Government
DEFRA	Department for Environment, Food and Rural Affairs
DPD	Development Plan Document
EA	Environment Agency
EEAWP	East of England Aggregates Working Party
EC	European Community
EEC	European Economic Community
EfW	Energy from Waste facility
ELV	End of Life Vehicle
EU	European Union
FZ	Flood Zone
GIS	Global Information System
GWh	Giga Watt per hour
ha	Hectare
HEC	Historic Environment Characterisation
HGV	Heavy Goods Vehicle
HRA	Habitats Regulations Assessment
HS2	High Speed 2 proposed railway
ILW	Intermediate Level Waste (radioactive waste)



IVC	In-vessel Composting facility
kW	Kilo Watt
LACW	Local Authority Collected Waste
LAA	Local Aggregates Assessment
LLW	Low Level Waste (radioactive waste)
LNR	Local Nature Reserve
LPA	Local Planning Authority
LoWS	Local Wildlife Sites
MCA	Minerals Consultation Areas
MPA	Minerals Planning Authority
MRF	Materials Recycling Facility
MSA	Minerals Safeguarding Areas
Mt	Million Tonnes
MW	Mega Watt
NNR	National Nature Reserve
NO2	Nitrogen Dioxide
NPPF	National Planning Policy Framework
NPPW	National Planning Policy for Waste
ODPM	Office of the Deputy Prime Minister
PAS	Planning Advisory Service
PDL	Previously Developed Land
PM10	Particle Matter
PPG	Planning Practice Guidance
PPS	Planning Policy Statement
PRoW	Public Right of Way
RCHW	Recycling Centres for Household Waste
SA	Sustainability Appraisal
SA/SEA	Sustainability Appraisal / Strategic Environmental Assessment
SAC	Special Areas for Conservation
SAM	Scheduled Ancient Monument
SARS	Strategic Aggregate Recycling Site
SFRA	Strategic Flood Risk Assessments



SMWLP	Suffolk Minerals & Waste Local Plan
SPA	Special Protection Area
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest
SCC	Suffolk County Council
SuDS	Sustainable Drainage Systems
SWS	Suffolk Waste Study
VLLW	Very Low-Level Waste (radioactive waste)
WCS	Waste Core Strategy
WPA	Waste Planning Authority



Glossary

Aftercare:	Following final restoration of a former quarry, the land is likely to re- quire further treatment to bring it up to the required standard for the approved after-use, for example agriculture. This entails annual monitoring leading to the identification of any necessary remedial works such as drainage or cultivation for five years.
Anaerobic Digestion:	Anaerobic (in the absence of oxygen) digestion of organic waste, typically energy crops, brewery waste or vegetable tailings, inside a closed vessel. The methane gas produced is used to generate elec- tricity and the digestate residue is used for fertiliser.
Aggregates:	Aggregates include crushed rock, sand and gravel or recycled mate- rials that are used in construction, typically for the production of con- crete, mortar, asphalt or as drainage media
Area of Outstanding Natural Beauty:	An AONB is an area designated under Section 87 of the National Parks and Access to the Countryside Act 1949 as an area of particu- lar natural beauty to be preserved and enhanced. In Suffolk, the Dedham Vale and the Suffolk Coasts & Heaths are designated AONBs.
Becquerel (Bq):	The standard international unit of radioactivity equal to one radioac- tive transformation per second.
Bio-aerosol:	Associated with the composting of green waste which releases small particles including spores which are carried in suspension on the wind.
Borrow Pits:	In the Suffolk context are sand and gravel workings used exclusively for a particular construction project, typically new road construction. The term borrow 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 ad- vantage of borrow pits is that they are normally very close to the con- struction project and are often connected to that project by routes which do not use the public highway.
Commercial & industrial waste:	Waste collected by private waste contractors.
Construction, demolition and ex- cavation waste:	Waste soils, clays, concrete, bricks, wood etc.



Composting:	Aerobic (in the presence of oxygen) degradation of organic waste, typically green garden waste, by microbes either inside buildings which is called in-vessel composting and/or in the open air in long piles of green waste called windrows. Examples include Local Authority Collected Waste that is sorted into the green waste bin by the householder. This is then collected by the local authority and taken to an In-vessel Composting facility (IVC) where the green waste is rapidly composted within ventilated units and the resulting compost sold for soil improver. The air passed through the compost is filtered via microbe supporting filters which remove the odour before it is released back into the atmosphere.
Construction, demolition and ex- cavation waste:	This includes rubble and clean soils.
County Wildlife Site:	Is a locally-designated wildlife habitat.
Development Plan Documents:	Contain planning policies and identify proposed sites for develop- ment and are subject to an Examination in Public before adoption by the relevant planning authority as planning policy.
End of Life Vehicle Facilities:	Also known as scrapyards.
Hazardous Waste:	This includes contaminated soils, waste oils, waste electrical goods and asbestos.
Heavy Goods Vehicle:	Is a term for any lorry with a gross weight of over 3.5 tonnes.
HS2:	High Speed 2 proposed railway between London, Birmingham, the East Midlands, Leeds and Manchester.
Household Waste Recycling Facil- ities:	Sites run on behalf of the County Council primarily for the collection of bulky household waste.
Inert waste:	Is a broad term but practically speaking would mean mainly surplus uncontaminated soils and clays.
Intermediate Level Waste:	In the radioactive waste context, these are radioactive wastes ex- ceeding the upper activity boundaries for LLW but which do not need heat to be taken into account in the design of storage or disposal fa- cilities.
Inert waste landfill or landraise:	Refers to the final disposal of inert waste either by the infill of a void space as landfill and/or construction of a mound above ground level as landraising.
Landbank:	A stock of planning permissions for land containing specified levels of minerals reserves. The landbank level is normally expressed in



	the number years' supply, based upon an average of the last ten years' sales or sub-regional apportionment or some other figure.
Local Aggregates Assessment:	Provides an assessment of aggregates supplies and is published by each Minerals Planning Authority.
Local Authority Collected Waste:	Waste collected by local authorities which includes household waste and trade waste.
Local Nature Reserve:	is an area of particular wildlife interest declared by a local authority under Section 21 of the National Parks and Access to the Country- side Act 1949, and usually managed by them.
Local Planning Authority:	In Suffolk, the LPAs are the District and Borough Councils who are responsible for planning for development other than minerals, waste, County Council development or Nationally Significant Infrastructure Projects (NSIP).
Low Level Waste:	In the radioactive waste context this includes metals, soil, building rubble and organic materials, which arise principally as lightly con- taminated miscellaneous scrap. Metals are mostly in the form of re- dundant equipment. Organic materials are mainly in the form of pa- per towels, clothing and laboratory equipment that have been used in areas where radioactive materials are used – such as hospitals, re- search establishments and industry. LLW contains radioactive mate- rials other than those acceptable for disposal with municipal and gen- eral commercial or industrial waste. It is defined as "radioactive waste having a radioactive content not exceeding four giga-becque- rels per tonne (GBq/te) of alpha or 12 GBq/te of beta/gamma radio- activity".
Material considerations:	Is a matter that should be taken into consideration when determining planning applications. For example, highways issues are a material planning consideration and loss of property values is not.
Minerals Consultation Areas:	A mechanism whereby District or Borough Councils consult the Min- erals Planning Authority upon proposed not minerals developments within MCAs. MCAs are designated where minerals resources are known to existing according to geological mapping.
Minerals Planning Authority:	Suffolk County Council is the MPA for Suffolk and is therefore re- sponsible for the determination of minerals related planning applica- tions and for the enforcement of planning control in respect of miner- als issues and the production of a minerals local plan (or a combined minerals and waste local plan).



Minerals Safeguarding Areas:	Areas where the Minerals Planning Authority will seek to protect min- erals development from other forms of development.
National Nature Reserve:	A nationally important area of special nature conservation interest, designated under Section 16 of the National Parks and Access to the Countryside Act 1949.
National Planning Policy Frame- work:	Contains Government planning policy on a range of issues including minerals.
National Planning Policy for Waste:	Contains Government planning policy on waste.
Non-hazardous Landfill and/or landraise:	Where Non-hazardous Waste is placed and compacted by machin- ery in engineered cells lined with plastic or clay. When each cell is full it is then sealed with plastic or clay then covered with soils and planted. The moisture that arises from the degradation of the waste is called leachate and is either extracted and treated before disposal or recirculated to aid waste degradation. The landfill gas that is gen- erated from the degradation of the waste can be vented passively or extracted and flared off and/or used to drive electricity generating equipment.
Non-hazardous Waste:	This includes commercial & industrial and local authority collected waste.
Norfolk & Suffolk Broads:	Designated under the Norfolk & Suffolk Broads Act 1988 of equiva- lent status of a National Park.
PPG:	Government Planning Policy Guidance website.
Proposals Map:	Part of the development plan document with indicates on an Ord- nance Survey map base the areas proposed for development (in this case minerals and waste development).
Radioactive Waste:	This includes Very Low-Level Waste (VLLW), Low Level Waste (LLW), Intermediate Level Waste (ILW) and Spent Fuel.
Ramsar:	Site of internationally important wetland for breeding birds identified for conservation under the Ramsar convention (1971).
Recycled Aggregates:	These are recycled concrete, recycled bricks, or other recycled waste materials, that are used as an alternative to sand and gravel or crushed rock.
Recycled Waste:	Involves the recovery of recyclable materials from the waste stream. Examples include Local Authority Collected Waste that is sorted into the recycled waste bin by the householder. This is then collected by the local authority and taken to the Materials Recycling Facility



	(MRF) where metals, plastics and paper etc. are removed and sent to commercial recyclers.
Restoration:	Refers to the reinstatement of a former quarry and/or landfill site to its final restored condition albeit not necessarily to the same level as before. Generally, where significant sized sites are involved then the restoration is carried out in stages and is said to be a phased resto- ration.
Residual Waste:	Waste which cannot be re-used, recycled or composted. Examples include Local Authority Collected Waste that is sorted into the residual waste bin by the householder. This is then collected by the local authority and taken to the Energy from Waste facility (EfW).
Scheduled Ancient Monument:	Is an historic building or site that is included in the Schedule of Mon- uments kept under the Ancient Monuments and Archaeological Ar- eas Act 1979.
Secondary Aggregates:	By-products used as a source of construction aggregates.
Site of Special Scientific Interest:	Site notified by Natural England under Section 25 of the Wildlife and Countryside Act 1981 as having special wildlife or geological features worthy of protection.
Site Selection Reports:	Part of the evidence base in support of the Suffolk Minerals & Waste Local Plan, that contain information that was used in the selection of sites for inclusion in the Plan
Special Areas of Conservation:	Site of international importance for nature conservation, classified under the European Union Habitats Directive.
Special Protection Area:	An area of international importance for the conservation of wild birds, classified under the European Union Conservation of Wild Birds Directive.
Specific Sites:	Are, in the minerals context, where viable mineral resources are known to exist, landowners are supportive of minerals development and the proposal is likely to be acceptable in planning terms. Such sites may also include essential operations associated with mineral extraction. Specific sites may also be used to identify sites for future waste development where the proposal is likely to be acceptable in planning terms.
Spent Fuel:	After removal form the reactor, radioactive spent fuel is held in pur- pose built facilities including ponds or dry stores before eventual dis- patch for reprocessing at Sellafield.
Suffolk Lorry Route Network:	This is a Suffolk County Council lorry management plan based upon a hierarchy of routes.



Suffolk Minerals Core Strategy:	Is a type of Development Plan Document which contains strategic minerals policies.
Suffolk Minerals Specific Site Allo- cations:	Is a type of Development Plan Document which allocates Specific Sites for minerals extraction.
Suffolk Minerals & Waste Local Plan:	Is a type of Development Plan Document which will contain strategic minerals and waste policies and identify sites for sand and gravel extraction and also potentially waste development.
Suffolk Waste Core Strategy:	Is a type of Development Plan Document which contains strategic waste policies and identifies Specific Sites and Areas of Search for waste development.
Suffolk Waste Study:	This is part of the evidence base for the Suffolk Minerals & Waste Local Plan and quantifies the amount of Local Authority Collected Waste, Commercial and Industrial Waste, Construction, Demolition and Excavation Waste, Hazardous Waste, London Waste and Radi- oactive Waste that needs to be managed over the Plan period.
Very Low-Level Waste:	In the radioactive waste context, this is waste with very low concen- trations of radioactivity. It arises from a variety of sources, including hospitals and the wider non-nuclear industry. Because VLLW con- tains little total radioactivity, it has been safely treated by various means, such as disposal with municipal and general commercial and industrial waste directly at landfill sites or indirectly after incineration.
	Its formal definition is, For wastes containing carbon-14 or hydrogen- 3 (tritium):
	- in each 0.1m3, the activity limit is 4,000 kBq for carbon-14 and hy- drogen-3 (tritium) taken together; and
	- for any single item, the activity limit is 400 kBq for carbon-14 and hydrogen-3 (tritium) taken together.
	Controls on disposal of this material, after removal from the premises where the wastes arose, are not necessary.
	Or; (b) in the case of high volumes of VLLW, radioactive waste with maximum concentrations of four megabecquerels per tonne (MBq/te) of total activity which can be disposed of two specified landfill sites. For waste containing hydrogen-3 (tritium), the concentration limit for tritium is 40MBq/te. Controls on disposal of this material, after removal from the premises where the wastes arose, will be necessary in a manner specified by the environmental regulators.
Waste Electrical & Electronic Equipment Recovery Facilities:	Often for example located within Household Waste Recycling Cen- tres, where members of the public can dispose of their unwanted fridges etc.



Waste Hierarchy:	The management of waste in accordance with the Government's waste hierarchy in order of preference of: prevention; preparing for re-use; recycling; other recovery and disposal is seen as an important tool for environmental protection including against climatic change and the protection of local water resources.
Waste Planning Authority:	Suffolk County Council is the WPA for Suffolk and is therefore re- sponsible for the determination of waste related planning applications and for the enforcement of planning control in respect of waste is- sues and the production of a waste local plan (or a combined miner- als and waste local plan)
Waste Water Treatment Facilities / Water Recycling Centres:	Also known as sewage works.
Waste Transfer Station:	these facilities involve the sorting of waste and the onward transfer of waste to recyclers, composters, energy from waste facilities or land-fills etc.



1. Introduction

1.1 Background

Suffolk County Council (SCC) commissioned Place Services to undertake an independent Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA) on the Suffolk Minerals & Waste Local Plan (SMWLP).

Place Services are acting as consultants for this work; therefore the content of this report should not be interpreted or otherwise represented as the formal view of Essex County Council.

1.2 The Suffolk Minerals and Waste Local Plan (SMWLP)

The Suffolk Minerals & Waste Local Plan (referred to hereafter as 'the Plan', or the 'SMWLP') was adopted by SCC on the 9th of July 2020. The Plan makes provision for minerals and waste development within Suffolk up to 2036, including identifying sites for sand and gravel extraction and waste management. It also contains appropriate planning policies for the determination of planning applications and for the safeguarding of existing minerals and waste development.

The following shows the SMWLP Vision as outlined in the existing adopted planning framework, and represents the purpose and remit of the Plan.

The Vision

"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, 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."

The process of plan-making, including the SA process, started in 2016. The following sub-headings offer a brief history of these processes.

1.3 Requirement for a Post-Adoption Statement

Once a plan or programme has been adopted, as is the case with the SMWLP, the Strategic Environmental Assessment (SEA) Directive requires those responsible for its preparation, to provide the public and the Consultation Bodies with information on how environmental considerations and consultation responses are reflected in the plan or programme, the reason for choosing the plan or programme as adopted in light of reasonable alternatives and how its implementation will be monitored



in the future.

This requirement is included within Planning Practice Guidance regarding Sustainability Appraisal and Local Plans; notably Stage E of the SA process, as can be seen in the figure below.

Figure 1: Stages in the SA process and their purpose





In detail, the Environmental Assessment of Plans and Programmes Regulations 2004 states that as soon as reasonably practicable after the adoption of a plan or programme for which an environmental assessment has been carried out under these Regulations, the responsible authority shall demonstrate the following:

(a) how environmental considerations have been integrated into the plan or programme;

(b) how the environmental report has been taken into account;

(c) how opinions expressed in response to -

- (i) the invitation referred to in regulation 13(2)(d);
- (ii) action taken by the responsible authority in accordance with regulation 13(4),

have been taken into account;

(d) how the results of any consultations entered into under regulation 14(4) have been taken into account;

(e) the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and

(f) the measures that are to be taken to monitor the significant environmental effects of the implementation of the plan or programme.

The aim and structure of this report is to address these requirements related to the adoption of the SMWLP.



2. How environmental considerations have been taken into account

2.1 Environmental Considerations in the SA Process

The Regulation 19 stage SA Environmental Report sets out the sustainability baseline and context (within Annexes A and B), identifies the sustainability issues affecting the Plan Area (within the main Environmental Report) and explains the development of the SA frameworks for the appraisal of both policy content and sites (within Section 3 of the main Environmental Report). It further appraises the different components of the SMWLP including the strategic objectives, strategy and site allocations both individually, cumulatively and at the 'whole Plan level'. Conclusions and recommendations are included for monitoring.

The sustainability issues for the SMWLP area were identified through a review of the relevant plans and programmes (at the international, national, regional and local level) together with an analysis of baseline information for the County. These issues were used to develop Sustainability Objectives which were used to appraise the objectives, policies and site allocations identified through the plan preparation process. Baseline information provided a basis for taking an objective view on the likely impact of policies on each SA Objective. Since the baseline also provided comparative data for conditions in other areas and information about trends, a judgement could also be made concerning the significance of such an impact.

The specific environmental considerations of site options were explored in depth, using a robust 'site pro-forma' or site assessment framework. This framework was formulated to differentiate between minerals and waste management sites for varying waste streams and facilities.

With regard to the SMWLP, three separate iterations of the Plan were published for consultation throughout the plan-making process. In 2016, an 'Issues and Options' Plan was consulted upon, followed by a 'Preferred Approach' Plan in 2017. This was followed by a 'Draft Submission' Plan in 2018. An Examination in Public (EiP) was held in 2019, and lastly a 'Modifications' consultation in 2019 addressed matters arising through the EiP.

All of the above iterations of the Plan that required consultation were accompanied by a SA and the SA process has been an integral part of the Plan's production. Previous documents produced, and consulted upon, as part of the SA process are outlined in the following section and sub-sections.

2.2 The History of SA Reports alongside SMWLP Iterations

2.2.1 Scoping Report (Stage A) 2016

A Scoping Report was published for consultation independently by Suffolk County Council from 26 September to 31 October 2016. This Scoping Report set out Stage A in the SA process as identified in Figure 1 of this report.

The Scoping Report was subject to a focused consultation with the three statutory consultees for SA (Historic England; The Environment Agency; and Natural England).



2.2.2 Issues and Options (Stage B) 2016

An Issues and Options Plan was consulted upon between 28 November 2016 and 6 February 2017, accompanied by a SA. This SA set out a number of policy assessments alongside reasonable alternative approaches.

The Plan at this stage largely represented proposed changes to the existing policy framework, and the SA assessed both the broad notion of a 'business as usual' approach alongside each proposed change / amendment as included with the Plan, again notionally.

2.2.3 The Preferred Options (Stage B) 2017

In October 2017, a Preferred Options Regulation 18 Plan and SA was produced and consulted upon between 30th October and 11th December. This Plan set out the Vision, Aims and Objectives for the area relevant to the context of the Plan. It also included general and specific policies for both minerals and waste, and site allocations for minerals extraction and waste management facilities.

The accompanying SA appraised numerous policies, including reasonable alternative policy approaches. The SA also appraised all submitted sites for consideration as allocations within the Plan. This included both preferred and alternative (non-preferred) sites / proposals for minerals extraction and waste management facilities.

2.2.4 Submission Draft Local Plan 2018

The Submission Draft Plan was published for consultation between the 11 June and the 23 July 2018. A further focused consultation was carried out in respect of Appropriate Assessment between the 5 November and 17 December 2018.

Since the Preferred Options Regulation 18 Consultation, the Plan evolved in accordance with updated evidence and representations received during the Preferred Options Plan consultation period.

Within the SA at that stage, commentary regarding the changes to policies and the subsequent appraisal of them throughout the plan-making and SA processes (including what constitutes a 'reasonable alternative' at each stage where necessary) was addressed.

The Environmental Report responded to Stages B and C of the Sustainability Appraisal process for the 'Submission Draft' Regulation 19 stage of the Plan. The key element of the SA at this stage was to build on the development of alternatives from the Preferred Options stage and assess effects. This stage:

- Tested the Local Plan objectives against the sustainability appraisal framework;
- Refined and re-appraised the Local Plan options including reasonable alternatives;
- Evaluated the likely effects of the Local Plan (policies and site allocations) and alternatives;
- Considered ways of mitigating adverse effects and maximising beneficial effects; and
- Proposed measures to monitor the significant effects of implementing the Local Plan.



2.2.5 Examination & Main Modifications 2019

Following public consultations on the Submission Draft Local Plan and Appropriate Assessment, the SMWLP was submitted to the Planning Inspectorate on the 21st December 2018 for Examination in Public (EiP). The EiP hearing sessions ran for five days in total over two weeks, between the 19th and 26th June 2019.

The independent examiner of the SMWLP wrote to SCC, post-EiP, to set out his preliminary findings of the soundness of the SMWLP. These findings concluded that the inclusion of some elements of the SMWLP as presented at EiP would likely mean that the Plan is unsound. As a result of this, modifications deleting those elements were necessary to make the Plan sound.

SCC drew up a schedule of modifications to the submitted SMWLP, including the omission of the Wangford site allocation for sand and gravel extraction. Additionally, other modifications were made to other elements of the Plan in response to the discussions of the EiP and the consultation of the draft SMWLP in the summer of 2018. The schedule of modifications was publically consulted on and further considered by the examiner.

A SA Addendum was produced to accompany the schedule of modifications and was made available for public consultation alongside the 'Suffolk Minerals & Waste Local Plan Modifications September 2019' as procedurally required of Local Plans and Sustainability Appraisal.

The Main Modifications were subject to public consultation between the 7 October and the 17 November 2019.



3. How the SA Environmental Report has been taken into account

3.1 The History of the SA Process

As identified in Section 2, a SA has accompanied the SMWLP at each consultation stage. As a result, and in line with the requirements of both SA and SEA, a number of recommendations were put forward to SCC, as the plan-makers, as to how the SMWLP could mitigate environmental concerns and maximise sustainability benefits. These are outlined below for each stage, with commentary as to whether (and how) the SMWLP factored in each recommendation, or not.

3.2 Recommendations taken forward throughout the SA process

The SA and plan-making process should be iterative, with recommendations and mitigation measures suggested in the appraisal of the Plan for consideration by the plan-makers. This sub-section sets out the iterative process that has been undertaken in the formulation of the Plan.

The following table outlines those recommendations and suggested mitigation measures that have been presented within past iterations of the SA at the Issues and Options, Preferred Options, Submission Draft and 'Modifications' stages. The table outlines the relevant policy and stage in the process that each recommendation was made in the accompanying SA. The final column outlines the specific SA recommendation and whether the Plan was amended, or otherwise suitably factored in the recommendation.

 Table 1:
 Recommendations taken forward throughout the SA process

Policy	Stage	Recommendation & Outcome
Vision, Aims ar	nd Objectives	& General Policies
Aims and Ob- jectives	Preferred Options	At the Preferred Options Plan stage, the SA made the recommendation that reference to aspirations regarding restoration and after-use for net or future sustainability benefits be included. It can be considered that this recommendation is suitably reflected within Policy Objectives 5 and 7 and additionally within the Plan Vision, as adopted.
Policy GP2: Cli- mate change mitigation and adaptation	Issues and Options	At the Issues and Options stage, the SA stated that, 'it is recommended that the policy wording surrounding the reduction of emissions is ex- panded to explicitly include traffic emissions. Although there is the caveat for the inclusion of travel plans where necessary, the overall policy work- ing focusses primarily on emissions from any new minerals and waste de- velopments but the impacts of the vehicles transporting the materials should also be clearly factored in when assessing the impact on climate

change.' At the Preferred Options stage, it was considered that the wider



Policy	Stage	Recommendation & Outcome
		Plan adequately seeks to reduce vehicle emissions through considera- tions stated in specific transport related Plan policies. Plan content reflect- ing the recommendations is included within the final version of the Plan, as adopted.
Policy GP3: Spatial strategy	Preferred Options	At the Preferred Options stage, the SA recommended that <i>'the</i> (then) <i>Policy's</i> reference to 'centres of population' relate to 'Key Centres for Growth' in relation to the main destination of minerals post-extraction, and the main sources of waste in the Plan area.' This recommendation was factored into the Policy at the Regulation 19 stage and remains. A further recommendation at that stage was <i>'the Policy includes a preference will be made to those sites that will 'not have an adverse impact.'</i> This might not be possible in consideration of the County's significant amount of environmental designations and the nature of minerals and waste development / management; it might be more realistic that sites with 'acceptable' impacts are included within the policy, with reference to the ability to mitigate.' This recommendation was also factored into the Policy at the Regulation 19 stage, and remains.
Policy GP4: General envi- ronmental crite- ria	Preferred Options	At the Preferred Options stage, the SA stated that, 'the Policy could how- ever strengthen the position of the MPA / WPA in setting out in more detail what would constitute an acceptable impact relevant to each theme. In ad- dition, the setting of designated and non-designated historic environment assets should also be protected alongside the asset itself in each in- stance.' At this stage, these recommendations can be considered to have been suitably factored into the Policy, with reference to the settings of her- itage assets included. Regarding a definition of what constitutes an 'ac- ceptable impact' some of the relevant policy criteria have been expanded as well as the Plan's inclusion of site-specific policies for Plan allocations.
Minerals Polici	es	
Policy MP3	Preferred	At the Preferred Ontions stage, the SA made a recommendation regard-

Policy MP3: Borrow Pits	Preferred Options	At the Preferred Options stage, the SA made a recommendation regard- ing the policy possibly extending the timescales of extraction beyond what is needed to serve projects, in so far as this requirement was not explicit. It added that, <i>'this could lead to unnecessary long term environmental im- pacts. It is recommended that a criterion regarding timescales is included within the Policy.'</i> It is considered that the policy now ensures the appro- priate balance of weighing up the economic benefits of such schemes with their potential environmental impacts. Although the recommendation has not been factored into the Policy, it should be acknowledged that the na- ture of all extraction is temporary and borrow pits are specifically con- nected to the construction of specific projects with no viable (or little eco-
		nected to the construction of specific projects with no viable (or little eco- nomic) use after that project has been completed.



Policy	Stage	Recommendation & Outcome	
Policy MP5: Cu- mulative envi- ronmental im- pacts and phas-	Preferred Options	At the Preferred Options stage, the SA recommended that <i>'cumulative impacts are considered not just in accumulation of other mineral sites, but all other development proposals regardless of type.'</i> This recommendation has been factored into the Policy.	
ing of workings	Submission Draft	At the Regulation 19 Submission Draft stage, the SA made the recom- mendation that, 'the Policy include the findings / recommendations of the HRA regarding project-level HRA requirements for both the Plan's site al- locations and also any new mineral extraction proposals.' These recom- mendations have been made within the Plan where deemed necessary, notably within site allocation policies (see below).	
Policy MP6: Progressive working and res- toration	Preferred Options	 notably within site allocation policies (see below). At the Preferred Options stage, the SA recommended 'that the Plan's supporting text set out to what level landscapes should be restored in line with local characteristics, the availability of sufficient material for backfilling and the implications this has regarding compliance with moving waste up the waste hierarchy.' This recommendation has not been factored into the Policy; however, the nature of extraction and any need for subsequent backfilling creates subsequent conflicts with moving waste up the waste hierarchy and potentially reducing waste miles should importation be needed for restoration to existing / pre-extraction levels. In reflection of a wider holistic view of both strategic minerals and waste planning at the plan-level, this recommendation was not extended to subsequent iterations of the SA. The Preferred Options SA also recommended that, 'although aspirational, the Policy could be expanded to factor in Green Infrastructure and networks in the context of restoration throughout the County.' This recommendation has been included within the Policy through the encourage- 	

Waste Policies

Policy WP1: Preferre Management of Options waste (Mt)	
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Policy	Stage	Recommendation & Outcome
Policy WP5: Open Air Com- positing	Preferred Options	At the Preferred Options stage, the SA recommended (for Policy WP6 – since covered in WP5) that 'the position of the co-location of in-vessel compositing facilities at landfill sites during restoration is clarified for either consistency with Policy WP5, or the difference in approach is explained in the supporting text.' This recommendation has been factored into the Policy of WP5, with a common approach to co-located composting facilities at landfill sites during their operation and restoration.
Policy WP6: In- vessel compost- ing facilities	Preferred Options	At the Preferred Options stage, the SA recommended that 'the position of the co-location of in-vessel compositing facilities at landfill sites during res- toration is clarified for either consistency with Policy WP5, or the differ- ence in approach is explained in the supporting text.' This recommenda- tion has been factored into the Policy of WP5, with a common approach to co-located composting facilities at landfill sites during their operation and restoration.
Policy WP8: Proposals for re- cycling or trans- fer of inert and construction, demolition and excavation waste	Preferred Options	At the Preferred Options stage, the SA made the following recommenda- tion: 'although generally compatible, the policy ensures that recycling facil- ities are not located to the detriment of the function and operation of exist- ing more traditional employment land. Despite this, the policy or support- ing text could include commentary to the effect that such proposals should be compliant with the general development principles of LPA policy, par- ticularly if such industrial areas are proposed for allocation in Local Plans.' The Policy has not factored in this recommendation, however the SA acknowledged at the Regulation 19 stage that such a recommendation is not necessarily within the specific remit of the Plan, and that the adopted Plan will form part of each LPA's suite of development plan documents. As such, there should be no conflicts between the Policy and any related policies within any LPA Local Plans once adopted. It was also recommended within the Preferred Options SA that 'the Plan set out the difference between policies (WP8) and MP5 and the need for two policies in the Plan regarding recycling or transfer of inert and con- struction, demolition and excavation waste. This recommendation was factored into the Plan. A notable change from the Preferred Options Plan to the Regulation 19 Plan is that previous Plan Policy MP5: Recycled ag- gregates, was deleted. At the Preferred Options stage, the Policy was worded as follows – 'The County Council will encourage temporary aggre- gates recycling facilities at minerals and landfill sites and encourage the siting of permanent recycling facilities near to the source of raw material and at locations which maximise the use of recycled aggregate e.g. in ur- ban fringe locations or brownfield sites. Proposals should also comply with the environmental criteria Policy GP4. 'The position of the Council within the Regulation 19 Plan is reflected in paragraphs 5.11-5.12 of the Plan.



Policy	Stage	Recommendation & Outcome	
		These paragraphs state, '(5.11) The types of facilities where recycled ag- gregates are produced vary from purpose built fixed installations to tempo- rary 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 Caven- ham Quarry. (5.12) If, in the future proposals for aggregates recycling fa- cilities requiring planning permission are made, then there are criteria- based policies included within the Plan.'	
Policy WP11: Approval of sites for disposal of inert waste by landfilling or landraise	Issues and Options	At the Preferred Options stage, the Policy factored in an Issues and Op- tions SA recommendation that stated that, 'the Policy could benefit how- ever from supporting text to outline the Council's stance on restoration lev- els associated with landfilling, and the subsequent stance on landraising proposals for disposal and for landscape engineering purposes.' This pre- vious inclusion has however not been progressed, as it was ultimately de- cided that each case should be considered on its merits.	
Policy WP12: Disposal of non- hazardous or hazardous waste by land- filling or land- raise	Issues and Options	At the Preferred Options stage, the Policy factored in an Issues and Op- tions SA recommendation that stated that, <i>'the Policy could benefit how- ever from supporting text to outline the Council's stance on restoration lev- els associated with landfilling, and the subsequent stance on landraising proposals for disposal and for landscape engineering purposes.' This pre- vious inclusion has however not been progressed, as it was ultimately de- cided that each case should be considered on its merits.</i>	
Policy WP13: Mining or exca- vation of landfill waste	Preferred Options / Submission Draft	At the Preferred Options stage, the SA made the following recommenda- tion: 'supporting text could be included in future Plan iterations that ex- plains the Council's position regarding the compatibility of such schemes with landscape policy. In addition, supporting text could also set out the position regarding the backfilling the voids created by such excavation.' This recommendation was not factored into the Plan at the Regulation 19 stage however was included as a 'Modification' in 2019, ensuring that pro- posals comply with progressive restoration requirements in MP6. This amendment was assessed within the SA process within the 'Suffolk County Council Minerals & Waste Local Plan (SMWLP) – Modifications Sustainability Appraisal (SA) – September 2019' document, with positive environmental outcomes.	

Site Allocation Policies

Policy MS1:	Submission	At the Draft Submission Regulation 19 stage, the SA recommended that,
Barham	Draft	'the Policy be expanded to seek the submission of an appropriate impact



Policy	Stage	Recommendation & Outcome	
		assessment regarding the Grade I listed medieval church of St Mary to ac- company any planning application, with mitigation measures included where relevant.' Within the SMWLP Modifications document, post-EiP, a criterion was added to the Policy that requires proposals to identify the po- tential impact upon the settings of the Grade I listed medieval church of St Mary and Shrublands Park.	
Policy MS2: Submission Barnham Draft	At the Draft Submission Regulation 19 stage, the SA recommended that, <i>'the Policy could seek the submission of an appropriate impact assess-</i> <i>ment regarding listed buildings, with mitigation measures included where</i> <i>relevant.'</i> Within the SMWLP Modifications document, a change to crite- rion (i) of the Policy was made to ensure that proposals safeguard and en- hance the setting of the Barnham Atomic Bomb Store Scheduled Monu- ment and listed buildings in the vicinity of the site.		
		At the Draft Submission Regulation 19 stage, the SA recommended that, <i>'the Policy add further detail regarding the specific assessment require-</i> <i>ments of work related to 'natural history interests', for instance whether</i> <i>there is a need for a project-level HRA to be undertaken to accompany</i> <i>any forthcoming planning application.'</i> Within the SMWLP Modifications document a change to criterion (j) of the Policy was made to ensure that proposals need to include the provision of a project level Habitats Regula- <i>tions</i> Assessment, that would make clear the broad avoidance and/or miti- gation measures and robust monitoring, identified at a strategic level that will be required and that restoration will ensure delivery of a net biodiver- sity gain long term, specifically with regard to the Breckland Special Pro- tection Area.	
Policy MS4: Cavenham	Submission Draft	At the Draft Submission Regulation 19 stage, the SA recommended that, <i>'the Policy add further detail regarding the specific assessment require-</i> <i>ments of work related to 'nature conservation interest', for instance</i> <i>whether there is a need for a project-level HRA to be undertaken to ac-</i> <i>company any forthcoming planning application.'</i> Within the SMWLP Modi- fications document a change to criterion (e) of the Policy was made to en- sure that proposals need to include the provision of a project level Habi- tats 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 Spe- cial Protection Area.	
Policy MS5: Layham	Submission Draft	At the Draft Submission Regulation 19 stage, the SA recommended that, 'the Policy include reference to the presence of the AONB 300m of the site in the landscape criterion and seek relevant assessment and possible	



Policy	Stage	Recommendation & Outcome	
		<i>mitigation requirements as a result.</i> Following EiP no change was deemed necessary to be made to the Policy as recommended within the SA, as such issues can be considered to be covered, and mitigation ensured if required, through adherence to general policy (Policy MP4).	
		At the Draft Submission Regulation 19 stage, the SA recommended that, <i>'the Policy does not include the requirement for an archaeological investi-</i> <i>gation and possible appropriate mitigation and the inclusion of such a re-</i> <i>quirement is recommended in light of the appraisal of the site within Sec-</i> <i>tion 10 of this Report and the Council's independent site assessment.'</i> Fol- lowing EiP no change was deemed necessary to be made to the Policy as recommended within the SA, as such issues can be considered to be cov- <i>ered, and mitigation ensured if required, through adherence to general</i> <i>policy (Policy MP4).</i>	
Policy MS6: Tat- tingstone	Submission Draft	At the Draft Submission Regulation 19 stage, the SA recommended that, <i>'the Policy add further detail regarding the specific assessment require-</i> <i>ments of work related to 'nature conservation interests', for instance</i> <i>whether there is a need for a project-level HRA to be undertaken to ac-</i> <i>company any forthcoming planning application.'</i> Following EiP, the policy has been modified to include that, in criterion (d), proposals detail their po- tential impacts upon nature conservation interest including trees, ditches, <i>watercourses, the Stour & Orwell Special Protection Area, European Pro-</i> <i>tected Species (Bats), Priority Species, Priority Habitats, which need to be</i> <i>adequately assessed and where necessary mitigation proposed. The rec-</i> <i>ommendation has therefore been factored into the SMWLP as adopted,</i> <i>through new reference to the Stour & Orwell Special Protection Area.</i>	
Policy MS7: Wangford	Submission Draft	At the Draft Submission Regulation 19 stage, the SA recommended that, 'the Policy add further detail regarding the specific assessment require- ments of work related to 'nature conservation interest', for instance whether there is a need for a project-level HRA to be undertaken to ac- company any forthcoming planning application.' Following EiP, this site al- location has been removed form the SMWLP.	
Policy MS10: Worlington	Submission Draft	At the Draft Submission Regulation 19 stage, the SA recommended that, 'the Policy add further detail regarding the specific assessment require- ments of work related to 'nature conservation interest', for instance whether there is a need for a project-level HRA to be undertaken to ac- company any forthcoming planning application.' Following EiP, the policy has been modified to include that, in criterion (c), proposals detail the likely adverse effects (either individually or in combination with other de- velopments) on the notified special interest features of Red Lodge Heath SSSI, Breckland SPA, Breckland SAC, Breckland Flora CWS, European	



Policy	Stage	Recommendation & Outcome	
		Protected Species, Other Protected Species, and Priority Habitats. The recommendation has therefore been factored into the SMWLP as adopted.	
Policy WS1: Sizewell A Nu- clear Power Sta- tion	Submission Draft	At the Draft Submission Regulation 19 stage, the SA recommended that, 'the Policy include that any forthcoming applications be accompanied by a suitable assessment and where relevant mitigation measures regarding surface water flooding.' Following EiP no change was deemed necessary to be made to the Policy as recommended within the SA, as such issues can be considered to be covered, and mitigation ensured if required, through adherence to general policy (Policy MP4).	



4. How the Results of Consultation shave been taken into Account

4.1 SA Consultations

The SA/SEA Regulations require that the authorities referred to in Article 6 (3) shall be consulted when deciding upon the scope and level of detail of information that is to be included in the final Environmental Report. These authorities are referred to as the statutory consultees and include the Environment Agency, Historic England and Natural England.

Formal consultation on the SA has been undertaken alongside each stage of consultation on the SMWLP and following these, responses were analysed where they specifically related to aspects of the SA. Where relevant and deemed necessary, these were taken into account at the next stage of SA work. The tables in the following sub-sections chronicles the consultation responses that subsequently influenced the SA, alongside any amendments that were made to the SA as a result.

4.1.1 Consultation Comments on the SA Scoping Report

Number / Re- spondent	Representation	Response / action
Environment Agency	 Water Resources We would welcome the enhancement and inclusion of the following points regarding water resources. The potential issues with removal of part of an aquifer and disrupting groundwater flows are included within Table 25. SA/SEA Objectives, associated questions and indicators on page 68. These issues should also be raised earlier, throughout the previous tables and in the preceding text for Tables 12, 16, 22 and 24. There is no mention of new authorisations and the implementation of the 2003 Water Resources Act (WRA), which removes from exemption dewatering as a licensable activity. This may or may not impact on existing abstractions held by quarries and will be a requirement for any new sites needing abstracted water for their 	All suggested amendments were made to the scope of the SA to inform subsequent iterations of the SA Environmental Report.

 Table 2:
 Scoping Report Consultation Representations and actions



Number / Re- spondent	Representation	Response / action
	activities. It would be beneficial to include this future consideration in the plan. We do not yet have a specific date when this is going to come into force but we will en- deavour to keep you updated.	
	Flood Risk	
	We would welcome the inclusion of the follow- ing points concerning flood risk within the rele- vant sections of the report.	
	 Section 3.3 of the document, page 35, refers to sea level rises, temperature rises and rainfall increases due to climate change, but specific mention should also be made to predicted river flow increases. The latest allowances are provided in the document 'Flood Risk Assessments: climate change allowances'. This could result in increased flood risk from rivers, where climate change allowances are significantly higher than they have been previously. We can provide further advice on how the latest allowances are to be applied if required. 	
	- Table 12, page 43 states that 'proposed minerals and waste developments must ensure they do not impede drainage in any way, and mineral processing plant is not at risk of flood damage'. We would welcome an additional clause stating that any proposed minerals and waste devel- opments should not impact any flood in- frastructure.	
	 Table 25, Page 71, section 7 refers to minimising flood risk. We would propose the inclusion of a bullet to state that minerals and waste developments should not have an adverse impact on flood infrastructure. It should also be noted that the report refers to the current Strategic Flood Risk Assessment (SFRA) as an aid for potential indicators. This provides a sound 	



Number / Re- spondent	Representation	Response / action
	indicator, but it is worth noting that any cli- mate change mapping may be super- seded following the latest climate change updates as highlighted above. Current cli- mate change data is unavailable for some river catchments and mention should be included that applicants may have to pro- vide, at their cost, for any future applica- tions.	
Historic England	Page 6 • We are pleased that one of the three strate- gic aims underlying the plan is to minimise and mitigate the impact of minerals and waste development on the environment. Of specific relevance are Strategic Objectives 5 and 7 which seek to minimise the harmful effects of minerals and waste development on the envi- ronment, including the historic environment.	Updates have been incorporated into future itera- tions of the SA regarding suggested wording amendments and to inform more detailed policy and site options commensurate to future stages of the Plan. It is considered that the level of infor- mation to inform the SA is adequate, in reflection of the high level and strategic content of the Plan.
	• We are pleased to note that Strategic Objec- tive 7 (waste development) includes a consid- eration of landscape character and request that this is also incorporated into the consider- ations for Strategic Objective 5 (minerals de- velopment).	
	Page 8	
	• We are pleased to note that Objective 3 of the Scoping Report identifies cultural heritage including architectural and archaeological her- itage; landscape and the interrelationship be- tween the above factors as environmental is- sues to be addressed in the SA report.	
	Page 11	
	• Table 2 - We recommend that the Norfolk and Suffolk Brecks Landscape Character As- sessment, 2013, produced by the Breck Part- nership and the two Historic England docu- ments referenced above are incorporated into the summary of most relevant plans and pro- grammes. The information contained within these three documents will provide useful	



Number / Re- spondent	Representation	Response / action
	guidance on the allocation of sites later in the process and will support the sustainability ap- praisal's proper consideration of the historic environment. The Landscape Character as- sessment may be accessed via Breckland District Council's website.	
	Page 26	
	• We encourage the explicit inclusion of the National Heritage List for England and the Suffolk County Council's Historic Environment Record within the list of data sets forming the evidence base for the Sustainability Appraisal.	
	Page 46	
	• We would welcome recognition that undis- turbed soils are a finite archaeological re- source. Even where reinstated, soil and min- eral extraction results in the permanent loss of the archaeological and paleobotanical record.	
	Page 54	
	• We are pleased to see that archaeology and the historic environment forms a consideration for preparing the sustainability appraisal meth- odology.	
	• We welcome the use of the term 'historic en- vironment' rather than heritage assets as this allows a broader definition of the historic envi- ronment to be considered including less tangi- ble cultural heritage.	
	• We would welcome recognition of the na- tional importance of the archaeological record in Suffolk where a combination of continuous occupation since at least the Mesolithic period and a largely rural landscape combines to provide an area of high archaeological poten- tial across all periods.	
	• We would welcome recognition of the partic- ular importance of sands, gravels and riverine deposits with regard to the early archaeologi- cal record.	



Number / Re- spondent	Representation	Response / action
	• We request that the term 'historic environ- ment' extends to SEA Theme/SA Objective 7 which is referenced in Table 17: Summary of key archaeology and historic environment is- sues. We suggest the following amended wording:	
	'To preserve or enhance the historic environ- ment historical buildings/sites, archaeological sites and other culturally important buildings.'	
	• We note that the sustainability appraisal rec- ognises that some scheduled ancient monu- ments lie in close proximity to current quarries and on mineral deposits and that there may be conflict between the two. We request that reference be made to the NPPF's requirement to form a positive strategy for the conservation of the historic environment and that the sus- tainability appraisal will give full weight to this requirement.	
	Page 56	
	• Table 18: Summary of key landscape issues - We request that the following wording is in- cluded within the column: the landscape is- sues identified and their implications for the plan; The Suffolk landscape and its relation- ship with historic settlements forms an im- portant component of the historic environment contributing to placemaking and local distinc- tiveness.	
	Page 61	
	 Mineral Extraction - We appreciate the inclusion of historic parks and gardens and listed buildings as part of the landscape and environmental protection designations that cover the county. We request that this list is expanded to include scheduled monuments and locally listed buildings. Page 67 	



Number / Re- spondent	Representation	Response / action
	 Objective 7: To preserve or enhance histori- cal buildings /sites, archaeological sites and other culturally important buildings. 	
	We again request that this objective is rewrit- ten as follows: To preserve or enhance the historic environment historical buildings/sites, archaeological sites and other culturally im- portant buildings.	
	• In our view, there is potential conflict be- tween the following objectives and Objective 7 and the table should be amended to reflect this to allow a fully informed understanding for future decisions reflecting the Local Plan.	
	Objective 12 - Avoid sterilisation of minerals and resources.	
	Objective 14 - Ensure a steady and adequate supply of minerals to meet the needs of society.	
	• We suggest that the following objectives should be considered to be neutral with re- gard to Objective 7 rather than negative.	
	Objective 17 - To meet the housing needs of the population.	
	• We suggest that the sustainability appraisal draws on the opportunities for positive place- making represented by the historic environ- ment and alters the following objectives to a positive compatibility.	
	Objective 19 - To minimise the impacts arising from the minerals and waste developments on where people live.	
	Objective 21 - To achieve sustainable levels of prosperity and economic growth and offer everyone an opportunity for employment.	
	Objective 23 - Promote sustainable invest- ment in the County.	
	Page 69 - 73 - Table 25 SA/SEA Objectives, associated questions and indicators	



Number / Re- spondent	Representation	Response / action
	 We request an additional question under SA/SEA Objective 4 To maintain/improve the quality and local distinctiveness of land- scapes/townscapes as follows; Does the plan Identify and protect the relationship be- tween historic settlements and the wider land- scape? As before, we request the following amend- ment to SA/SEA Objective 7 To preserve or enhance historical buildings /sites, archaeo- logical sites and other culturally important buildings as follows; To preserve or enhance the historic environment historical build- ings/sites, archaeological sites and other cul- turally important buildings. 	
	• We are very encouraged to note the consid- eration to the historic environment that has been included within associated questions and indicators under Objective 7. We request the following amendments for consistency of approach with the earlier amendments to ap- propriately consider the historic environment as more than heritage assets.	
	Does the PlanCause a loss of, or harm to, the character and/or setting of historic herit- age assets?	
	Indicator: Buried archaeology as listed in the NMR or HER or considered to be likely within a particular site by the County Archaeologist and/or Historic England.	
	Indicator: Minerals & Waste applications sub- mitted and refused due to adverse impact to the Historic Environment	
	Indicator: Minerals & Waste applications sub- mitted and allowed with conditions relating to the Historic Environment	
	Indicator: Site allocations supported or opposed by Historic England	
	Glossary	



Number / Re- spondent	Representation	Response / action
	• For clarity we request that the following terms are added to the glossary.	
	Heritage Asset - A building, monument, site, place, area or landscape identified as having a degree of significance meriting considera- tion in planning decisions, because of its herit- age interest. Heritage asset includes desig- nated heritage assets and assets identified by the local planning authority (including local listing). NPPF, 2012	
	Historic Environment - All aspects of the envi- ronment resulting from the interaction be- tween people and places through time, includ- ing all surviving physical remains of past hu- man activity, whether visible, buried or sub- merged, and landscaped and planted or man- aged flora. NPPF, 2012	
	Summary	
	We are supportive of the aims of the draft scoping report for the Suffolk Minerals & Waste Plan and are very much encouraged by the consideration given to the historic envi- ronment. We understand that minerals extrac- tion and waste management is of regional and national importance and that these land use needs require careful management with re- gard to conservation of the historic environ- ment. We request that the changes suggested within this document are made as the sustain- ability report develops further. The methodol- ogy for the sustainability appraisal can have profound implications for the proper identifica- tion and conservation of the archaeological and built record but we are encouraged that, with the suggested alterations, the local plan will be prepared with appropriate regard for the preservation and enhancement of the his- toric environment.	


	Response / action
 There is a good level of coverage of the main environmental considerations throughout the document and these are in line with environmental considerations within the MPS and marine plans. The reference to the East Inshore and Offshore Marine Plans within the table of other documents to consider is important to retain. The section on marine aggregates (page 58/59) is also important to retain, and I would 	Noted. No actions necessary.
plans and marine licensing within this section as both will be important considerations if you do decide to investigate marine won aggre- gates - I would also encourage references to studies on the environmental impact of marine aggre- gates as they are not always as high as you might expect and the industry is highly regu- lated – I noted a comment within the report	
marine can be higher than those for land won aggregates.	
We advise that the following types of plans re- lating to the natural environment should be considered where applicable to your plan area;	Updates were incorporated into all subsequent it- erations of the SA to inform more detailed policy and site options. It was considered that the level of information to inform the SA has been ade- quate, in reflection of the high level and strategic
- Green infrastructure strategies - Biodiversity plans	content of the Plan.
- Rights of Way Improvement Plans	
- Shoreline management plans	
- Coastal access plans	
- River basin management plans	
- AONB and National Park management plans.	
- Relevant landscape plans and strategies.	
molean-slad	hain environmental considerations through- ut the document and these are in line with invironmental considerations within the MPS ind marine plans. The reference to the East Inshore and Off- hore Marine Plans within the table of other ocuments to consider is important to retain. The section on marine aggregates (page 8/59) is also important to retain, and I would incourage further reference to the marine lans and marine licensing within this section is both will be important considerations if you o decide to investigate marine won aggre- ates. I would also encourage references to studies in the environmental impact of marine aggre- ates as they are not always as high as you hight expect and the industry is highly regu- ated – I noted a comment within the report hat mentioned environmental impacts on the narine can be higher than those for land won ggregates. We advise that the following types of plans re- ating to the natural environment should be onsidered where applicable to your plan rea; Green infrastructure strategies Biodiversity plans Rights of Way Improvement Plans Shoreline management plans Coastal access plans River basin management plans AONB and National Park management lans.



Number / Re- spondent	Representation	Response / action
	With reference to Table 24: Compatibility Ma- trix, we have the following observations to make with respect to SA/SEA objectives 3. To maintain/improve soil quality/resources, 4. To maintain/improve the quality and local distinc- tiveness of landscapes/townscapes and 6. To conserve/enhance biodiversity or geodiversity:	These potential incompatibilities have been fac- tored into the appraisal of relevant options.
	- Objective 11. Promote effective restoration and appropriate after-use of sites may conflict with Objectives 3, 4 or 6 (depending on what the appropriate after-use is)	
	- Objective 16. To minimise the impacts aris- ing from the minerals and waste develop- ments on where people live may be neutral for 3, 4 and 6.	
	- Objective 19. To maintain and improve rec- reation and amenity may conflict with 6.	
	With reference to Table 25: SA/SEA Objec- tives, associated questions & indicators, we have the following comments:	
	- As set out in Planning Practice Guidance, you should be monitoring the significant envi- ronmental effects of implementing the current local plan. This should include indicators for monitoring the effects of the plan on biodiver- sity (NPPF para 117).	
	- The natural environment metrics in the base- line information are largely driven by factors other than the plan's performance. They are thus likely to be of little value in monitoring the performance of the Plan.	
	It is important that any monitoring indicators relate to the effects of the plan itself, not wider changes. Bespoke indicators should be cho- sen relating to the outcomes of development management decisions.	Amendments were made within subsequent iter- ations of the SA in response to these comments.
	Whilst it is not Natural England's role to pre- scribe what indicators should be adopted, the following indicators may be appropriate:	



Number / Re- spondent	Representation	Response / action
	 Biodiversity: Number of planning approvals that generated any adverse impacts on sites of acknowledged biodiversity importance. Percentage of major developments generating overall biodiversity enhancement. Hectares of biodiversity habitat delivered through strategic site allocations. Landscape: Amount of new development in AONB/National Park/Heritage Coast with commentary on likely impact. Access and green infrastructure: Percentage of the city's population having access to a natural greenspace within 400 metres of their home. Length of greenways constructed. Hectares of accessible open space per 1000 population. 	

4.1.2 Consultation Comments at the Preferred Options (Regulation 18) Stage

Table 3:	Regulation 18	(Preferred Options)	Consultation Representations and actions	
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Number / Re- spondent	Representation	Response / action
SM/32 Verity	Support	Noted.
SM/202 Tarja Burtsal	Belstead Quarry 2020 proposal I object quite simply as I do not believe the infrastrac- ture will be able to cope with the increased traffic of lorries operating in the area. The old A12 and the Swann Hill area are already una- ble to sustain the current level of rush hour traffic.	Noted. This is not considered a specific comment on the SA.



Number / Re- spondent	Representation	Response / action
SM/220 Robert Ayers	As I resident of Cavenham village I have a concern over the proposed expansion of Marston's pit at Cavenham and the backfilling of quarried areas, which I understand will lead to a near doubling of the current volume of large lorries through Cavenham and Tudden- ham villages. I am concerned about the im- pact this will have and would urge planners to seek alternative routes for the lorries. Perhaps an extension/re-surfacing of the track that cur- rently runs from the Cavenham road to a sew- age works, which could be connected to the Higham Road, eliminating the need for lorries to enter Tuddenham or Cavenham, and giving access to the A14 with limited impact.	Noted. This is not considered a specific comment on the SA.
E/108 Charlie Chris- tensen, The Envi- ronment Agency	Additionally objective 8 of the Sustainability Appraisal to minimise flood risk only includes a key indicator relating to fluvial flooding. We would also like to see this incorporate surface water, coastal and groundwater flood risk.	The necessary amendments have been made and factored into the SA at this Regulation 19 stage.
E/78 James Meyer, Suffolk Wildlife Trust	Sustainability Appraisal (SA) Document Section 2.3.3 – As set out in our comments on the Issues and Options consultation draft) our letter of 6 th February 2017), bullet point 1 de- scribes the different types of nature conserva- tion site designations. However, it appears to confuse the interna- tional designations. By way of clarification, Ramsar, Special Protection Area (SPA) and Special Area of Conservation (SAC) are sepa- rate designations with different qualifying cri- teria and designated under different legisla- tion. Potential impacts on Ramsar sites, SPAs and SACs must all be assessed through the Habitats Regulations Assessment (HRA) pro- cess (see section below). We recommend that this bullet point is re- worded to correctly identify the types of	 Section 2.3.3 - The necessary amendments have been made and factored into the SA at this Regulation 19 stage. Section 3.2 – The table, to which this comment relates, responds to the methodology which quantifies the impacts highlighted within the appraisal of sites. No action required. Objective 11 – Restoration to original conditions is included as 'positive' in line with the pre-existing conditions of voids. Positive impacts remain relevant in order to offer a range of possible impacts within the SA.



Number / Re- spondent	Representation	Response / action
	 designations, the legislation they are designated under and their hierarchy. Section 3.2 (Table 4) – We query the statements under Objective 6 that there are no "statutory habitat sites within 250m" of the site options. A number of the preferred site options have statutory nature conservation sites (SPAs, SACs, Ramsar sites, NNRs or SSSIs) on or within 250m of them and therefore this statement is incorrect. It is also unclear why 250m has been used as the trigger distance for assessing impacts on statutory designated sites? Also, in relation to Objective 11 restoration to the original condition of the site would be a "Neutral" impact not a "Positive" one. 	
E/87 Chris Hem- mingsley, Brett	Sustainability Appraisal Having reviewed the Sustainability Appraisal, we wish to highlight some concerns with the results. This is mainly in the form of some in- consistencies in approach and also some ty- pographical areas within the Sustainability Ap- praisal. Dealing with the typographical errors first, with regard to Layham Quarry there are a number of errors within Table 40 on page 161 where the level of impact is not reflective of the indi- vidual assessment on page 179. For example, for Objective 1: Table 40 states no impact, where on page 179 it is stated the site will have a negative impact. Furthermore, the site at Wangford has three separate allocations for varying uses but when looking at Table 40 only one of the uses is included for compari- son. To allow for an objective comparison to be made for the sites and to ensure that the most appropriate sites are allocated we would request that Table 40 be reviewed to ensure that the correct level of impact is stated and that all site allocations are included.	Noted. The typographical errors have been recti- fied within the SA at this stage. The landscape impacts highlighted for Barham reflect a 'policy off' appraisal. The introduction of site specific policies within the Plan represents a 'policy on' appraisal within the SA at this stage, which reflects that the landscape is capable of long-term restoration / mitigation. The landscape and biodiversity impacts at Grove Farm have been rectified in order to ensure a consistency in approach. Impacts for SO23 have not been included as there is not a comparable level of information across all sites in order to quantify impacts on a consistent basis. Impacts for SO24 reflect the consistent utilisation of the information presented within Site Assess- ment Reports undertaken and have not been amended.



Number / Re- spondent	Representation	Response / action
	Our concerns on the inconsistencies in ap- proach are between each Site Selection Re- port and the Sustainability Appraisal, of partic- ular interest to Brett:	
	Barham Quarry	
	Within the Site Selection report the comments on landscape state that site is acceptable with recommendations for further working and res- toration. The Sustainability Appraisal states, however, that there will be a negative impact upon a Special Landscape Area. We suggest that the score within the Sustainability Ap- praisal be amended to having a neutral im- pact.	
	Grove Farm	
	Landscape: the Site Selection Report recom- mends that the extent of the site should be modified to make it acceptable with potential impacts on the Special Landscape Area. The Sustainability Appraisal states that the site will have a Significant Negative impact due to the Special Landscape Area. We consider that the impact at Grove Farm within a local land- scape designation is being given greater weight than other sites that are being allo- cated that lie within national landscape desig- nations.	
	Biodiversity: the Site Selection report identi- fies that the site lies in close proximity to County Wildlife Sites and Local Nature Re- serve. The Sustainability Report states that Grove Farm will have a Significant Negative impact upon biodiversity. Again, the score seems disproportionate particularly when con- sidered that sites have been allocated within and in close proximity to European and na- tionally designated sites.	
	SA Objective 23, Sustainable investment: the Sustainability Appraisal gives no recognition that Grove Farm is located adjacent to Pound-	

field Products, concrete products specialists.



Number / Re- spondent	Representation	Response / action
	Circa 70,000 tonnes per annum of sand and gravel won from Grove Farm would (if allo- cated and approved) be supplied direct to the Poundfield Products facility.	
	SA Objective 24, Promote efficient movement: as above the Sustainability Appraisal provides no consideration to the proximity to Poundfield Products and the positive impact that taking 70,000 tonnes per annum direct to site would have on HGV movements.	

4.1.3 Consultation Comments at the Submission Draft (Regulation 19) Stage

Table 4:	Regulation 19	(Submission	Draft) Consultation	on Representations and actions
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Number / Re- spondent	Representation	Response / action
Dr Adrian Lucas (+9 others) (received via email)	The council's pre-submission documentation states: "There is a need to give consideration to locally voiced issues regarding minerals and waste facilities, particularly from residential development in proximity to such facilities, as the basis for assessing the need for new or upgraded waste facilities Potential impacts on health, well-being and quality of life should be taken into account in identifying suitable sites for minerals sites and waste facilities. The potential impact of noise, dust, blasting, vibration, lighting and water pollution generated by ongoing operations needs to be considered." The contents of this objection letter should be considered in line with the council's statement, above. In this context, those who have put their names to this letter implore the council and the proposers of this plan to compassionately rethink and then drastically reduce the enormous size and scope of the proposed mineral extraction site and new	The plan is an in-principle document, meaning that some of the assessments won't be com- pleted until the planning application stage. How- ever, at the site selection stage a high-level as- sessment was performed on each site and the results of these are presented in the Site Selec- tion Reports. This information has been embed- ded into the SA as it has been authored by tech- nical specialists and represents the best and most relevant information available. In addition as a result of new case law in the Eu- ropean Court of Justice People Over Wind and Sweetman v Coillte Teoranta (C-323/17), has re- quired that SCC revise the Appropriate Assess- ment under the Habitat Regulations. This has been done, and a focussed consultation regard- ing the revised assessment has taken place. The Sustainability appraisal does identify potential ef- fects as a result of quarry operations, however Policy MS4 and GP4 have been written to ad- dress these issues at the planning application stage. Before the granting of planning application



Number / Re- spondent	Representation	Response / action
	 recycling plant, which will negatively impact on local residents and business in numerous ways (detailed below, but not limited to those). Although the council's pre-submission consul- tation materials appear to be extensive, close examination reveals that insufficient analysis and some incorrect conclusions have been drawn with regard to a significant number of areas of impact (including specific SA Objec- tives). This was confirmed at the consultation meeting on 10th July, 2018, at Tuddenham Village Hall, where representatives from the council and the quarrying company admitted, in response to a number of questions, that no investigations had been carried out in any of the areas that they were questioned on. The SA Reg. 19 Report itself concludes that inves- tigation is required in eight areas of potential impact (Section 9.2.4, pg. 168). These areas identified in SA Reg.19 for fur- ther investigation, taken together with the parts of the consultation document that are lacking and/or incorrect, can be summarised as follows: the impact of additional HGVs on safety, amenity and highways maintenance; the impact on the Brecks landscape and how this could be appropriately restored; the requirement for an archaeological inves- tigation; significant potential impact on nature con- servation in an area that includes 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; the impact on health and well-being of ex- traction, infilling and (not mentioned in the 	 the criteria in policy MS4 and GP4 need to be met. Policy MS4 part "f" and part "g" require assessments and mitigation of noise impacts respectively. Sustainability Appraisal objective 9 identifies that effects of HGV movements on air quality has not been assessed and this will be required at the planning application stage if HGV movements do exceed the 100 HGV per day threshold. Sustainability Appraisal objective 24 identifies a positive effect as has been no objection from the County Highways Authority and that lorries are able to access the Lorry Route Network. The site meets these criteria. Potential implications have been identified to groundwater source protection zones and implications of the site being within flood zone 2. policy MS4 parts "j" and "k" are included so that any planning application must identify how these issues will be addressed adequately before being granted planning permission. Parts "c" and "e" of Policy MS4 set out requirements the planning application need to address for archaeology and nature conservation respectively. Part "c" of the plan requires archaeological assessment before permission can be granted and part "d" safeguards the presence of the Black Ditches Ancient Monument. Part e of the policy requires assessments of impacts on European Protected Species, Priority Species, Priority Habitats, Stone Curlew, Woodlark, Nightjar, and designations, such as the SSSI. Parts "f" and "g" of the policy require that a planning application assess and address, through appropriate mitigation, noise and air quality issues respectively, for the purposes of human health. this includes impacts to people living near the site, businesses operating near the site. These measures will also protect users of the lcknield Way Trail.



Number / Re- spondent	Representation	Response / action
	 Report) the screening and processing of recycled materials on air quality, including increased dust and pollutant concentration; the negative impact of increased noise and vibration (from extraction, recycling and HGV movements) and ensuring that, at the very least, the relevant noise sources adhere to the relevant parts of the EU Directive on Environment Noise and BS4142 standards; safeguarding rights of way and areas close to the proposed site used by the public. A number of public areas and properties are within 250m of the boundary of the proposed site (see annotated map below); the impact on underlying groundwater source protection zones, surface water and other aspects relating to the effect on water; the uncertain/negative impact on local businesses (completely ignored in the Council's pre-submission materials), such as the adjacent Longwood Organic Farm, Chaise House Stables and the businesses along the route that additional HGVs would use, including The White Hart, Tuddenham Mill and Tuddenham Nurseries. 	Please note that Schedule 2 of The Organic Farming Regulations 1999 apply to the "benefi- ciary", which is defined as: (a)a person whose application, or whose request under regulation 13(1) in respect of land comprising one or more organic parcels, has been accepted by the Minis- ter; or (b)a person who occupies the whole or any part of an organic unit following a change of occupation of the holding, who has given an un- dertaking to comply with all the obligations as- sumed by its previous occupier under these Reg- ulations, in so far as they relate to land com- prised in that organic unit, or the part of that or- ganic unit occupied by him, and whose undertak- ing in such terms has been accepted by the Min- ister. This definition does not apply to the opera- tor of the sand and gravel extraction, but to the operator of the farm: paragraph 10 requires the beneficiary to abide by terms for the protection of soil, air and water (although as previously stated policy MS4 does require impacts on air quality and water to be assessed and appropriate miti- gations proposed before planning permission will be granted); paragraph 5 relates to the manage- ment of farm boundaries, which the operation of the quarry should not interfere with as a bund for screening will likely be required within the quarry boundary.
	This letter sets out some of the specific areas where the pre-submission information is incor- rect or insufficient in terms of the assessed impact of the proposals. In particular, the en- tire summary of the estimated impact set out in Table 41, pg. 169 of the SA Reg. 19 Report is almost entirely incorrect and inconsistent with large parts of the contents of Tables 54 and 75. For example, in several areas, Table 41 states positive or no impact, where the re- port itself has identified negative or uncertain impact elsewhere and where the report itself concludes that eight areas require further as- sessment.	boundary. Regarding breaches of legislation, criteria within the policies are present in order to assess, and appropriately minimise and mitigate potential is- sues with air quality, water quality, noise, nature conservation (including European Protected Spe- cies, Priority Species, Priority Habitats, Ancient Woodland and designations such as SSSIs and SACs), and human health and amenity. If the site is granted planning permission ensuring that measures minimise and mitigate these issues are implemented and maintained correctly will fall to the SCC's planning enforcement function. Regarding comment that SCC have not complied

For the reasons set out above and below, the proposals made, at the time of writing, to

Regarding comment that SCC have not complied with the Planning and Compulsory Purchase Act



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	expand the mineral extraction site and create an inert waste recycling plant at Cavenham (Policy MS4/Map FH6) are considered incom- plete, unsound, in some cases misleading and have the potential (subject to further as- sessment) to breach several aspects of UK and EU legislation and/or regulatory stand- ards. As such, the proposals are strongly ob- jected to.	2004, Section 19 (5)(a), a Sustainability Appraisal was produced and was available during consultation.
Dr Adrian Lucas (+9 others) (received via email) (detailed comments)	The entire summary of the estimated impact set out in Table 41, pg. 169 of the SA Reg. 19 Report is almost entirely incorrect and incon- sistent with large parts of the contents of Ta- bles 54 and 75. For example, in several ar- eas, Table 41 states positive or no impact, where the report itself has identified negative or uncertain impact elsewhere and where the report itself concludes that eight areas require further assessment.	Tables 54 and 75 of the SA reflect a 'policy off' appraisal of the site proposal at Cavenham and cumulative effects on the broad area. This has been undertaking looking at the constraints on site(s) and within the site boundary(s). Table 41 respond to a 'policy on' appraisal of Policy MS4. The appraisal of Policy MS4 explores whether those effects highlighted in Table 54 are ade- quately 'dealt with' within the Policy criterion. This approach to assessing sites and corre- sponding site policies separately through a 'pol- icy off' and 'policy on' approach is outlined within Section 9.1 of the SA on page 161. The response issued here can be considered to cover all those instances of confusion within the consultation comments surrounding 'contradic- tory' statements.
	SO16 Public Nuisance / Impact on where people live. SO18 Noise/Vibration SA Reg. 19, SO16 states: "Potential negative impacts have been highlighted for those pro- posals at Cavenhamwith those sites pro- moted for mineral extraction and infilling in particular being less than 250 metres from some residential properties this SA takes a precautionary approach and uncertain cumu- lative impacts are highlighted at this stage". The Report then states that, "Further infor- mation / assessment and mitigation proposals	The SA raises the potential for effects on public nuisance and noise and vibration (SO16 and SO18) due to the proximity of residential proper- ties through the 'policy off' appraisal of the site proposal in Table 54. These effects are considered to be adequately 'dealt with' within the criteria of Policy MS4: Cav- enham. This Policy ensures that planning per- mission would not be granted should mitigation not be provided through an appropriate scheme. The Local Plan is an in-principle (i.e. strategic) document and the allocation of sites within it does not guarantee that planning permission will



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	required (including the need for stand-off buff- ers)". Therefore, the proposal as it stands has had insufficient assessment on impact. The table on pg. 206 of the SA Reg.19 Report details those properties and areas affected within the 250m boundary. It is unacceptable for proper- ties to be that close to a proposed extension and will risk being in breach of a number of pieces of legislation (see the legislation/stand- ards section below).	be granted if schemes are not considered ac- ceptable. Detailed schemes will be scrutinised at any planning application stage against the poli- cies of the Local Plan. At that stage the ade- quacy of mitigation, as submitted, will be consid- ered in detail.
	Regarding SO18 (Noise). At the minimum, the SA Reg. 19 Report, Table 54 pg. 206, states, "The properties in the vicinity of Cavenham Road/The Street may require an additional stand-off buffer associated with noise mitiga- tion".	
	Has the council undertaken and published an assessment of impact of noise and vibration levels at various times of the day to (quoting from the council Report) "Ensure that a Statu- tory nuisance is not caused under the Envi- ronmental protection Act 1990 by reference to BS4142" at all boundaries? What about ad- herence to the EU Directive on Environmental Noise? There is particular concern about those boundaries closer to properties and public amenities towards Cavenham village and on the eastern edge of Tuddenham, along Cavenham Road, near/within Long- wood Farm and at a new build property just off lcklingham Road near to the north-west tip of the proposed site boundary.	
	This lack of detailed assessment in this area at this stage makes the proposal unsound as it stands. Notwithstanding this, it doesn't take an expensive and time-consuming profes- sional assessment to recognise that the vast expansion of the existing site, as proposed, will cause unacceptably high levels of noise at	



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	 a number of locations, thus causing a public nuisance. The proposals should be altered to drastically reduce the size of the proposed expansion and ensure that no property or regularly used public space, amenity, path or road is within 250m of the boundary or, alternatively, to cancel the proposed expansion altogether. In addition, suitable mitigation strategies are required because noise will travel over 250m and there are very few natural noise-reducing boundaries at the proposed site (see photograph below, for example). SO9. Traffic/HGV Lorries & SO24 Transport It is well known that the roads through the central parts of Tuddenham and Cavenham already suffer far too high numbers of HGVs to/from the existing gravel site. At the meeting on 10th July, the representative for the quarrying company stated honestly that the quarrying activity, and in particular the HGVs that serve the site, do already have an impact on those villages. Note also that there are no pavements along the vast majority of the routes that these trucks will (and do currently) use. There is already significant danger to pedestrians and cyclists and the risk to public safety will inevitably increase if these proposals were to be implemented. The majority of residents in these villages already feel very strongly that the HGV traffic through these villages is already unacceptably high, but their complaints so far have not resulted in changes. Any proposal that causes an increase in this HGV traffic is completely unacceptable and should not even have been considered for proposal without, at least, first incroporating draft mitigation plans to drastically reduce or remove the impact. In SO24 Transport, Table 54, pg.207, the council claims there is a positive impact. 	The SA, in assessing sites against SO24, explores whether they have sufficient access to roads of a suitable classification – in this instance the Suffolk Lorry Route Network / Local Access Lorry Routes. The information to determine effect sin the SA in this regard has been taken from the Site Assessment Reports for each site, which include comments from SCC Highways. 'Positive' impacts have been identified where 'The proposal has no objection from the County Highways Authority and access is directly onto the Suffolk Lorry Route Network' in order to 'promote efficient movement patterns in the County (where possible).' This is outlined within The Sustainability Framework for the assessment of site options (Table 4 of the SA, page 69). Regarding impacts on neighbouring villages, this is also considered through a number of policies (and policy criteria) within the Plan that would have to be adhered to at the planning application stage. These policies are: Policy GP4: General environmental criteria (re: vehicle movements, access and the wider highways network); and Policy MP5: Cumulative environmental impacts and phasing of workings; and Policy GP2: Climate change mitigation and adaptation (re: travel plans)



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	additional 70-80 HGV movements per day (council's own SA Reg. 19 Report). The claim in the Report that this will be a positive impact and the statement from the quarrying com- pany representative are contradictory; the council makes no justifiable explanation as to why it thinks that there is a positive impact on transport through these proposals. The coun- cil's statement is therefore totally unaccepta- ble and unsound.	
	The Report states in Table 54 on page 207, SO24, "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. The existing access arrange- ments are acceptable based on the existing flows." This does not constitute a sound justifi- cation for concluding that the impact on traffic in the adjacent villages will be positive, or even that there is no or uncertain impact — common sense would conclude that there will be negative impact because (as the quarrying company representative pointed out at the public meeting on 10th July) the additional traffic has to go one way or the other (in lieu of a new relief/access road - see below). The council's argument and conclusions are there-	
	fore unsound. Contradicting, on pg. 281 of the SA Reg.19 Report, the council states, "there may be cu- mulative impacts associated with those pro- posals at Cavenham (CA1, CA2 and CA3 unison) should this combination of sites ex- ceed 100 movements a day. For this reason, uncertain impacts are associated with the Cavenham sites and highlighted within this cumulative impact assessment". Why is the figure of "100" movements a day used as	



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	threshold? Why only "may be" cumulative im- pacts? There is insufficient analysis detail.	
	How can the council consider the traffic impli- cations to be acceptable when it states in the SA Reg.19 document that, "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 deter- mined."?	
	Concern was expressed at the public meeting on 10th July about hazardous materials being transported to and (when/if rejected at the plant) along village roads near to people's houses and businesses. The council must re- spond to this valid concern as part of a proper impact study.	
	To attempt to partly mitigate these criticals is- sue, proposals have been voiced for a new access road to the A14, that drivers could be encouraged or contractually required to use. This would hopefully reduce the traffic impact through the villages for those quarry/recycling vehicles (existing and new) who would join the A14. However, at the meeting on 10th July, the representative for the quarrying company admitted that it would be difficult to force all drivers to use any new access road, espe- cially if they wanted to join the A11, where an access road to the A14 would only lengthen their route. Nevertheless, the proposals should consider contractually insisting that ve-	Depitive offects were bigblighted in line with
	hicles to/from the recycling plant use a new access road and that monitoring, signage, road layout design, etc. at the site en- trance/exit would direct drivers accordingly to enforce this. SO20 Health & Well-being	Positive effects were highlighted in line with SO20, in so far as this objective did not identify any 'additional' effects that were not highlighted for other SA Objectives. The approach to as- sessing sites against SO20 is outlined within The Sustainability Framework for the assessment of site options (Table 4 of the SA, page 74).
	The council's SA Reg. 19 Report, Tables 54 and 75, somehow concludes that there is a positive impact to health and well-being by	In broader terms, uncertain / negative effects were highlighted for SO16 (To minimise the im- pacts arising from the minerals and waste



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	this proposal, yet provides no supporting ar- gument or information for this conclusion, other than considering no impact to be made "associated with the current operational status of the working to which this allocation repre- sents an extension". Note: the Report doesn't state that there will be no impact, but an un- justifiable positive one. The Report makes this (frankly, ridiculous) conclusion because (in its flawed opinion) there is no impact with the current operation on the site (not defensible) then an enormous proposed extension would	developments on where people live), uncertain effects for SO18 (To minimise production of noise at quarries), and uncertain / negative ef- fects for SO19 (To maintain and improve recrea- tion and amenity) which are all related to health under the SA's 'social' objectives.
	have no impact either — yet the Report offers no justification for this. This is a fundamentally unsound statement with completely unsound, unexplained, reasoning, drawing an unsound conclusion with no logical, supported, defensi- ble justification. SO19 Recreation & Amenity Despite stating in Tables 54 and 75 of the SA Reg. 19 Report that there is uncertain impact on SO19, the council tries to claim on page 284 of that Report that there is no impact if both Cavenham and Worlington sites are taken "in unison". That is a flawed argument; one site (Worlington) they claim isn't impacted and that Cavenham site possibly is, yet put- ting them together means there's no impact: indefensible, illogical, reasoning. Furthermore, the council only refers to the fact that "a byway exists on and in close proximity to the wider site which should be retained on	The approach to identifying cumulative effects is to identify whether there is any 'additional' effects beyond those experienced at individual sites. The cumulative effect for SO19 is highlighted as 'no impact' due to the individual impacts at Cav- enham and Worlington not being related to one another i.e. there is no single factor related to recreation / amenity that would experience ef- fects from both sites. The Plan is an in-principle document, meaning that some of the assessments will not be com- pleted until the planning application stage or through an Environmental Impact Assessment. SA is a strategic undertaking and is relevant to the level of content of the Plan it is assessing. It must be done fairly and consistently using a comparative level of information across site sub- missions.
	its definitive alignment with the southern end should being fenced from the rest of the site". Yet the council completely ignores the impact on recreation and amenity to those using both the lcknield Way near the north-west bound- ary and the footpaths through the adjacent National Nature Reserve / Cavenham Heath, which have boundaries with no safeguarding zone around them in the	



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	 proposed extension area (refer to the map below for the highlighted areas). Furthermore, the impact on public amenity cannot be assessed without a proposal for the description and height of the boundary to the proposed site and a description and height of any new structures to be constructed across whole site during the entire course of the site's lifespan. None has been provided, making the proposal incomplete and unsound. SO10 — Air Quality (incl. Dust and Other Pollutants) At the meeting on 10th July, no one representing the council or the quarrying company disagreed with or objected to the statement from a resident that both the extraction of sand/gravel and the recycling/screening of waste materials generates dust. Dust is recognised as a health hazard as well as defined as a 'statutory nuisance'; see the legislation section below relating to the Environmental Protection (Prescribed Processes and Substances) Regulations 1991. Has the council and/or proposers generated an independent analysis of the increase and type of dust that will be generated to (quoting form the SA Reg. 19 Report), "Ensure that a Statutory nuisance is not caused under the Environmental Protection Act 1990, in terms of dust"? It is incorrect and unsound for the council to claim on pg. 281 of the SA Reg. 19 document that "there will be no holistic / cumulative impacts associated with Air Quality". Unless all new operations were undertaken in a sealed unit (not proposed or practically/commercially feasible), there must be an effect but the council has not quantified this with an assessment and cannot therefore determine the level of impact. If the council insists on pursuing 	The SA explores 'air quality' in regard to transport movements through any Air Quality Management Area, and also related to bioaero- sols. Evidence surrounding the effects resulting from dust from specific proposals would not be identifiable at this strategic level, and will be con- sidered at the development management stage. The Plan includes criteria regarding dust within Policy MS4: Cavenham and also within: • Policy GP4: General environmental criteria • Policy WP5: Open Air Composting • Policy WP6: In-vessel composting facilities



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	these expansion proposals, it should obtain an independent investigation into the amount and type of dust and other pollutants that will enter the air, water and land around the pro- posed site and only then determine what the level of impact would be. Also, see the section relating to encroachment of the safeguarding area / buffer zone into public areas/rights of way. SO1 Surface Water/Groundwater & SO8 Flood Risk SA Reg. 19 document (June 2018) states that "Groundwater Source Protection Zones (SPZ 1 and 3) are affected by this proposal", (refs. Table 54, pg. 203, and Table 75, pg. 278), with a negative impact on CA1, CA2 and CA3. On pg. 278, however, it contradicts the table and states there is "No Impact", purely be- cause it takes Cavenham and Worlington pro- posals together. This is misleading.	The approach to identifying cumulative effects is to identify whether there is any 'additional' effects beyond those experienced at individual sites. The cumulative effect for SO1 is highlighted as 'no impact' due to the individual impacts at Cav- enham and Worlington not combining to have any magnified effect on water quality beyond those identified for the individual sites.
	 When asked about the impact on groundwater at the public meeting at Tuddenham Village Hall on 10th July, 2018, a representative for the gravel company told attendees that no hydro-geological survey had been done yet. Until the council has published an independent impact assessment on the effect of surface/ground water (drainage, flooding, water table, etc.) as a result of proposed increase in extraction area, the proposals are incomplete, contradictory and unsound. SO21 Impact on Local Businesses, Prosperity & Economic Growth & SO23 Impact on Investment With regard to SO21 (economic prosperity and growth), the council has only considered the very small number of potential new jobs created by/at the proposed site, yet has seemingly completely failed to investigate and report any analysis of the negative or uncertain impact on existing and potential new local 	SA effects need to be based on available quanti- tative evidence. The SA uses consistently availa- ble information, in this instance input from the site submissions / call-for-sites forms to identify whether additional employment opportunities would be forthcoming. There is no quantitative and reliable evidence available to determine the effects of minerals and waste operations on ex- isting non-related businesses that could be used fairly in the assessment of all site options.



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	businesses. As a result of failing to undertake and/or report a more thorough investigation, the council has incorrectly concluded that there is an overall positive impact regarding SO21/23.	
	With respect specifically to SO23 (economic investment), the council has incorrectly con- cluded, and seemingly failed to investigate the possibility, that there would be no negative or uncertain impact on economic investment in existing and/or new businesses the local area as a result of the proposed expansion. This is an incorrect conclusion. At 'best', there is un- certain impact.	
	Relating to both SO21 and SO23, local busi- ness owners have already expressed con- cerns (via public meetings and on social me- dia) about the impact of the proposals; rang- ing from increased HGV movements to impact on amenity and safety. There is no doubt that a better analysis of the situation would have revealed at least uncertainty about the impact on existing and new businesses. For exam- ple, existing businesses may consider that the impact is such that they either relocate/close their business or choose not to expand. See below for further expansion on these points relating to a select of specific local busi- nesses.	
Mr James Meyer, Suffolk Wildlife Trust	As raised in our Preferred Options response, we query why a trigger distance of 250m has been used in Section 3.2 Table 4 Objective 6 for assessing impacts on statutory designated sites? Given that the reasons for designation of statutory sites varies, Natural England's Im- pact Risk Zones (IRZ) should be used to de- termine whether a proposed development has the potential to result in an adverse impact on such a site.	The SA in the assessment of sites draws upon the ecological input of 'Site Selection Reports' in the first instance rather that 'proximity testing'. This specialist technical input from SCC ecol- ogists was forthcoming for all sites (see Site Se- lection Reports and correlation between these findings and that of site appraisals in the SA). The 250m distance included within 'Table 4: The Sustainability Framework for the assessment of site options' (page 69) for SO6 (to conserve/en- hance biodiversity or geodiversity) was initially in- cluded as a precautionary distance; however the



Number / Re- spondent	Representation	Response / action
	Use of Natural England's Impact Risk Zones in the assessment or sufficient justification for the use of a blanket 250m trigger distance.	assessment of sites in the SA and the effects highlighted have since been expanded to factor in wider and more holistic effects relevant to spe- cific protection objectives of designations, as un- dertaken by SCC ecologists. Table 4 on page 69 of the SA could be updated to reflect the methodology of the SCC 'Site Se- lection Reports' if this is deemed necessary.
Dr Natalie Gates, Historic England	The sustainability appraisal in respect of Bam- ham has not assessed the most highly desig- nated and nearest designated heritage assets or taken into account the mitigation measures proposed in MS2 are inadequate (Planning Practice Guidance , paragraph 018 reference ID 11-018-20140306 revision date 06 03 2014).	 The SA, on page 198, states that, 'A number of Listed Buildings are in close proximity to the site; the nearest (Meadow Cottage and Carine Cottage) are located approximately 600m to the east of the site. 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). 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. 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.' A negative effect is suitably highlighted. Both positive and uncertain effects were highlighted in the appraisal of Policy MS2, to reflect in turn the Policy's inclusion for the requirement of 'the provision of an archaeological field evaluation and deposit modelling for palaeolithic potential at depth' and also the lack of a criterion requiring mitigation of any effects on nearby listings and historic records. Further, in Section 12.3.3 of the SA (page 297), the SA makes recommendations for the Plan at



Number / Re- spondent	Representation	Response / action
		 Policy MS2: Barnham - The Policy could seek the submission of an appropriate impact assessment regarding listed buildings, with mitigation measures included where relevant. This recommendation is considered sufficient for a strategic level assessment on the basis that detailed level mitigation and impacts will be iden- tified at the development management stage.
Farah Chaudry (re- ceived via email) , Team Leader, Nor- folk & Suffolk, Natu- ral England	 We consider that the Sustainability Assessment (SA) process has been undertaken satisfactorily but we have some comments to make on the findings as follows: Table 4: We suggest changing the wording for assessing impacts for biodiversity from "statutory habitat sites" to SSSIs, SAC's, SPAs and Ramsar sites. The wording is misleading as there are SSSIs which are designated for species and for geology which wouldn't be covered by this definition. Policy MP1: The SA identified that there will be negative effects on landscape for Policy MP1 but no mitigation measures are proposed. We advise that mitigation measures need to be identified where there is potential to impact on nationally designated landscapes, i.e. AONBs. Policy MS1: Barham: We would like some clarity regarding the Sustainability Appraisal for Policy MS1. Section 9.2.1 states that the Policy can be seen to address impacts on Sandy Lane Pit Barham SSSI suitably; Table 38 shows a positive score for biodiversity/geodiversity, however Table 51: Site appraisal for Barham allocation shows the Sustainability Impact to be negative for biodiversity/geodiversity. There appears, therefore, to be a contradiction in relation to the findings of the SA in relation to this policy. 	At the time of writing, 'statutory habitats sites' was included as a catch all term to include SSSIs, SACs, SPAs and Ramsar sites. Since then, the NPPF 2018 has introduced the term 'Habitats Sites' to reflect SACs, SPAs and Ram- sar sites only. If required, the SA can action the recommendation of Natural England in referring to 'SSSIs, SAC's, SPAs and Ramsar sites' within Table 4. The SA is a strategic undertaking in the knowledge that certain effects can be mitigated at the development management stage. The SA raises the issue that mitigation is needed, but has not considered any detailed scheme / plan- ning application against which the suitability of mitigation could be discussed. The impacts raised regarding landscape are intended to guide policy (either thematic or site-specific) to ensure that mitigation is explored by any developer / site promoter at the application stage. Table 51 of the SA reflects a 'policy off' appraisal of the site proposal at Barnham, highlighting a negative effect for biodiversity/geodiversity. This has been undertaking looking at the constraints on site and within the site boundary. Section 9.2.1 and Table 38 respond to a 'policy on' ap- praisal of Policy MS1. The appraisal of Policy MS1 explores whether those effects highlighted in Table 51 are adequately 'dealt with' within the Policy criterion. Table 57 of the SA reflects a 'policy off' appraisal of the site proposal at Wangford, highlighting a



Number / Re- spondent	Representation	Response / action
	for Policy MS7. Table 44: Impact on Sustaina- bility Objectives: Policy MS7 shows a positive score for the landscape/townscape objective whereas Table 57: Site appraisal for Wangford allocation indicates a negative out- come for the landscape/townscape objective. There appears, therefore, to be a contradic- tion in relation to the findings of the SA in rela- tion to this policy also.	negative effect for landscape/townscape. This has been undertaking looking at the constraints on site and within the site boundary. Table 44 re- sponds to a 'policy on' appraisal of Policy MS7. The appraisal of Policy MS7 explores whether those effects highlighted in Table 51 are ade- quately 'dealt with' within the Policy criterion.
	We agree with the conclusions regarding the Impacts per Sustainability Objective/Theme for landscape and biodiversity/geodiversity in that negative effects for these themes cannot be ruled out. We agree with the recommenda- tions for changes to the Plan where these re- fer to HRA.	
Mr Tony & Kris Rider (received via email)	We have studied with interest the preferred options sustainability appraisal for Cavenham Quarry, CA1,CA2 and CA3, as it relates to Im- pacts, specifically pages 174-178. We have previously objected in writing to the increased activity sought at this site, in terms of its envi- ronmental impact (noise pollution, air pollu- tion, and increased traffic and resultant levels of pollution).	SA effects need to be based on available quanti- tative evidence. The SA uses available infor- mation, in this instance input from SCC High- ways, to determine transport related impacts in regards to effects of traffic on the environment (SA Objective 9), highway safety (SA Objective 24), human health and wellbeing (SA Objective 20), and air quality (SA Objective 10). This evi- dence has been utilised consistently for the ap-
	However, it seems that there is a glaring omission in the appraisal, in that nowhere is there input from the Highways department on what is obviously going to result in a large in- crease in lorry flow on the C class roads to ac- cess the wider road network via the villages of Cavenham and Tuddenham St Mary.	praisal of all sites (allocated and alternative) within the SA. The SA is a strategic undertaking and can not always identify detailed effects, in- stead relying on these to be picked up at the de- velopment management stage or through the un- dertaking of an Environmental Impact Assess- ment.
	These may well be part of a previously as- sessed Suffolk Lorry Route Network and des- ignated as Local Access Lorry Routes, alt- hough I suspect that this was introduced in bygone times of smaller and lighter lorries, and the Highways department should be re- quired to survey existing lorry impact at and around the present site and the villages re- ferred to above to consider current impact and	As mentioned, input from SCC Highways was sought and received during the Plan's site selec- tion process, and at the submission stage con- sultation and utilised within the SA as the most relevant and appropriate evidence at the site level. It states in the Cavenham Site Selection Report that "The County Highways Authority have not object to the proposed highways ac- cess arrangements." The assessment of traffic



Number / Re- spondent	Representation	Response / action
	 whether that in itself is acceptable in this day and age. Only with that information can any impact from the proposed extension to the site be adequately measured and assessed. In- deed, one could suggest that there is an op- tion for the proposer to be "invited" to provide his own separate access to the A14, and thence the A11, utilising his own tracks across the land. After all, he will have a lot of the raw materials already on site to keep costs down, and profit from the existing workings to fund the work. Additionally , in terms of public rela- tions for both the business and for Suffolk County Council, what a statement of responsi- ble and minimal impact – a "win, win" if ever there was one. We rest our case, and will watch develop- ments with much interest. Please acknowledge receipt of this representation. 	effects were based on current traffic levels at- tributed to the quarry, as it is not known what lev- els of traffic are expected from the extended site. Should a significantly higher level of HGV traffic be proposed in a planning application this would need to be assessed and other access arrange- ments potentially considered. It should be noted generally, that thematic Policy exists within the Plan regarding such issues and any forthcoming scheme would have to adhere to this policy content; in short, the allocation of sites within the Plan does not override the re- quirements of any scheme to adhere to relevant Policy.



5. The Reasons for Choosing the Plan as Adopted in light of Reasonable Alternatives

5.1 Reasonable Alternatives in the SA Process

The SMWLP policies, site allocations, vision, and aims / objectives as adopted have been the result of a significant plan-making process. In this process, numerous alternative approaches have been explored, appraised through the SA process, and consulted upon.

Alternatives for all these elements are chronicled in the following tables, alongside the reasons for their rejection or selection.

Policy	Reasons for Selection	Alternative	Reasons for Rejection
Policy GP1	Reflecting national guidance, Policy GP1 has been included as it sets out the County Coun- cil's interpretation of decision making in the context of sustain- able development.	None considered rea- sonable	N/A
Policy GP2	Proposed minerals and/or waste development should take into account climate change issues. The Minerals Product Associa- tion 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. Waste development can for ex- ample contribute to reducing me- thane (CH4) by capturing and utilizing landfill gas to generate electricity. Policy GP2 below sets out the criteria for the con- sideration of proposals for	None considered rea- sonable	N/A

5.1.1 General Policies



Policy	Reasons for Selection	Alternative	Reasons for Rejection
	climate change mitigation and adaption. For these reasons, the Policy has been included.		
Policy GP3	 The following factors have been considered in drafting the key diagram and spatial strategy and can be seen as the reasons for selecting the Spatial Strategy as included within Policy GP3: 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 popula- 	Policy	The previous Local Plan Policy indi- cated that (for Minerals as per the Minerals Core Strategy) 'Preference will be given to aggregate sites in Suf- folk located in the broad belt that fol- lows the A14 stretching from east of Ipswich to the western extremity of the county and other areas identified on the accompanying plan, where ge- ological information suggests the ex- istence of viable deposits of sand and gravel.' The Waste Core Strategy in- cludes a Spatial Strategy regarding 'where individual sites are well related to the Suffolk Lorry Route Network, centres of population and sources of waste and do not have adverse im- pacts upon features of environmental importance or endanger human health.' The previous Spatial Strategies can be considered unaligned in accord- ance with co-located minerals and waste activities / management and for that reason the alternative has been rejected in favour of an approach that factors in a wider range of considera-
tion and therefore sources of waste; g) in the past landfill dependant on temporary waste manage-		tions, including access to the strategic lorry network (and other sustainable transport nodes), the key sources of waste and growth as well as environ- mental concerns.	
	ment uses followed minerals ex- traction, whereas waste is in- creasingly being managed at permanent facilities that are lo- cated with suitable highways ac- cess in proximity to centres of	Alternative 2: To pro- vide for the best pos- sible geographic dis- persal of sand and gravel across the County	The Alternative does not factor in a wide range of considerations, such as the high level of ecological and land- scape constraints within the County, as well as locating activities in proxim- ity to key centres of population and growth. For this reason the alternative



Policy	Reasons for Selection	Alternative	Reasons for Rejection
	population and therefore sources of waste;		has been rejected in favour of the pre- ferred Policy approach.
	 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. 	Alternative 3: A spa- tial strategy based on sites with the least amount of environ- mental impacts	Although a significant factor in the se- lection of the preferred Spatial Strat- egy of the Policy, a pure reliance on such areas can not be expected to ensure the delivery of the required supply of minerals by extracting where they occur, or adhere to no- tions of the proximity principle and a desire to locate activities close to the sources of waste arisings and planned growth. For this reason, the alternative has been rejected in fa- vour of the preferred Policy approach.
		Alternative 4: A spa- tial strategy based on the strategic road net- work only	The alternative represents a singular consideration for the broad locations of minerals and waste activities, how- ever does not consider a wider range of considerations such as environ- mental constraints and locating activi- ties in proximity to the main sources of waste and supply of minerals (i.e. in accordance with planned growth). For this reason, the alternative has been rejected in favour of the pre- ferred Policy approach.
	Alternative 5: The previous Preferred Options policy word- ing	The Policy has changed since the Preferred Options stage, with refer- ence to individual sites being in close proximity to <i>major</i> centres of popula- tion and where sites do not have <i>po-</i> <i>tentially significant</i> adverse impacts. In accordance with the recommenda- tions of the SA at the Preferred Op- tions stage, <i>major</i> centres of popula- tion were considered more strategi- cally important as focuses for miner- als and waste activities than more general growth locations (and better related to positive outcomes regard- ing the sources of waste and planned growth). Additionally, <i>potentially sig-</i> <i>nificant</i> adverse impacts would better	



Policy	Reasons for Selection	Alternative	Reasons for Rejection
			reflect a balance of sustainability con- siderations in reflection of heightened levels of growth required in the County District / Borough level. This considers better mitigation solutions being viable throughout the plan pe- riod and the unlikelihood that all po- tential sites would have positive or neutral economic, social and environ- mental outcomes. For these reasons, the alternative has been rejected in favour of the preferred Policy ap- proach.
Policy GP4	The supporting text for the Policy within the Plan states that, 'it is not the intention of the County Council to restate other policy documents or legislation within this policy, but to provide a gen- eral list of issues that would were appropriate be taken into ac- count when reaching a decision upon a particular planning appli- cation. This list has been de- rived from the issues that the NPPF, NPPW and PPG indicate should be taken into account.' For this reason, the Policy as worded has been selected as the most appropriate.	None considered rea- sonable	N/A

5.1.2 Minerals Policies

Policy	Reasons for Selection	Alternative	Reasons for Rejection
Policy MP1	The Plan states that Policy MP1 states that the County Council will allocate sites containing 9.300 Mt of sand and gravel. Analysis of the submitted infor- mation in the relevant Site As- sessment Reports indicates that these sites in total contain 14.770 Mt. However, taking into	Alternative 1: To plan for a higher indicative figure than the identi- fied 10 year rolling sales as calculated (>12.180 Mt over the plan period / repre- senting a higher indic- ative buffer of 31%)	The alternative would result in a buffer of over 31%, which is consid- ered above what can be reasonably expected to be required to meet planned growth in the County over the Plan period. For this reason the alternative has been rejected.



Policy	Reasons for Selection	Alternative	Reasons for Rejection
	account the proposed start dates and levels of production at new sites, it is estimated that at least 2.59 Mt of the 14.770 Mt will still remain to be worked which re- duces the resources likely to be worked within the plan period to 12.180 Mt. This would leave a safety margin of 31% which is not considered excessive when considering the uncertainties of future demand for sand and gravel and potential future prob- lems that might arise that pre- vent one or more of the pro- posed sites from being devel- oped. For this reason, the Policy has been selected.	Alternative 2: To plan for an indicative lower figure than the identi- fied 10 year rolling sales as calculated (<12.180 Mt over the plan period / repre- senting a lower buffer than 31% / no buffer)	The alternative would result in a no buffer / a buffer of less than 31%, which is considered too low a safety margin when considering the uncer- tainties of future demand for sand and gravel and potential future problems that might arise that prevent one or more of the Plan's proposed sites from being developed. For this rea- son, the alternative has been re- jected.
Policy MP2	Please see Section 5.1.5.	Please see Section 5.1.5.	N/A
Policy MP3	The Policy regarding borrow pits has been included due to the de- mand for sand and gravel for identified construction projects. The Policy allows the principle of borrow pits close to construction projects and connected to that project by routes which do not use the public highway to mini- mise public impacts as per Na- tional Planning Practice Guid- ance on the planning for mineral extraction in plan making and the application process.	None considered rea- sonable	N/A
Policy MP4	The Plan states that, 'from time to time proposals are made for the creation of reservoirs or flood alleviation schemes that in- volves the extraction of sand gravel and its removal from site. These reservoirs besides provid- ing water storage capacity can also be a significant source of sand and gravel to supply the	Alternative 1: To re- move the policy and rely solely on the gen- eral environmental criteria policy (GP4).	The alternative has been rejected in favour of thoroughness in including policy considerations for all potential minerals activities.



Policy	Reasons for Selection	Alternative	Reasons for Rejection
	general market.' For the pur- poses of thoroughness in includ- ing policy considerations for all potential minerals activities, the Policy has been included.		
Policy MP5	The Plan states that, '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 oper- ations to an extent that they be- come unacceptable. This policy aims to provide clarity as to how the County Council will consider such circumstances.' For this reason the Policy has been in- cluded / selected.	None considered rea- sonable	N/A
Policy MP6	The Plan states that, 'progres- sive working and restoration re- fers 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 ex- traction. 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.' This approach can be	None considered rea- sonable	N/A



Policy	Reasons for Selection	Alternative	Reasons for Rejection
	considered to be less intensive and therefore less intrusive on any nearby receptors. For this reason, the Policy has been in- cluded.		
Policy MP7	The Policy seeks an outline strategy which sets the general parameters of the proposed ac- tion required to bring the re- stored land up to the required standard for the intended after- use. For this reason the Policy has been selected.	None considered rea- sonable	N/A
Policy MP8	The Plan states that, 'minerals can only be worked where they occur, which normally within the open countryside. Ancillary de- velopment such as concrete batching plants and asphalt plants would not normally be al- lowed in the open countryside in the absence of adjacent miner- als workings and therefore should be removed once miner- als extraction has ceased.' For this reason, the Policy as worded has been selected and included within the Plan.	None considered rea- sonable	N/A
Policy MP9	The Plan states that, 'as im- portant as proposing new miner- als development is safeguarding existing, planned or potential fa- cilities from other forms of com- peting development.' A key prin- ciple of sustainable development is to maximise sustainable trans- portation and to minimise trans- portation in the first instance. For this reason the Policy has been included and selected.	Alternative 1: To not include safeguarding criteria (as stated in the policy) and allow the relevant authority to treat each proposal / application on a case by case basis.	The Plan is a strategic document that seeks to ensure a steady supply of minerals until the end of the plan pe- riod and the safeguarding of sustaina- ble transportation practices. In order for this to be ensured, the safeguard- ing of port and rail facilities and facili- ties for the manufacture of concrete and asphalt has been included and the alternative rejected.
Policy MP10	The Plan states that, 'the County Council has defined the Minerals Safeguarding Areas (MSAs)	Alternative 1: That the County Council will safeguard those	An alternative of minimising the quali- fying threshold for consultation to 1 hectare (as opposed to 5 hectares in



Policy	Reasons for Selection	Alternative	Reasons for Rejection
	based upon sand and gravel re- source information provided by the British Geological Survey. The Minerals Consultation Areas (MCAs) are slightly larger be- cause a buffer of 250 metres has been added around the edges. This additional buffer is designed to avoid potential steri- lisation issues arising because of conflicts with potentially sensi- tive land-uses such as proposed residential development.' For this reason, the Policy has been selected and included within the Plan.	Minerals Safeguard- ing Areas located within the Minerals Consultation Areas identified on the Pro- posals Map from pro- posed development in excess of 1 hectare which is not in ac- cordance with the De- velopment Plan.	the Policy approach) was rejected as it represented a less pragmatic ap- proach to the County's growth needs. For instance, the alternative could lead to a scenario where planning ap- plications for only small levels of growth are consulted on and opposed despite not having a significant effect on future minerals supply.

5.1.3 Waste Policies

Policy	Reasons for Selection	Alternative	Reasons for Rejection
Policy WP1	The Plan states that, 'the 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 docu- ment. The figures are not limits but are indicative. Although there is not an immediate identi- fied shortfall in waste manage- ment facilities when the need	Alternative 1: To plan for lower indicative waste arisings, based on an assumption of improving technolo- gies in recycling and re-use.	The alternative scenario has been re- jected as it does not indicate the find- ings of the Suffolk Waste Study (2017). The SWS indicates that LACW arisings will potentially rise to 0.470 Mt per annum in 2036 from 0.397Mt in 2015, but otherwise all other waste streams / types are pro- jected to decrease over the plan pe- riod. This is reflected within the Pol- icy, and for this reason the alternative has been rejected.
	arises the following policies are in place.' The NPPW requires that Waste Planning Authorities, including Suffolk County Coun- cil, should identify sufficient op- portunities to meet the identified needs for their area for the man- agement of waste streams. For this reason, the Policy has been included.	Alternative 2: To plan for higher indicative waste arisings, to meet the possibility of unplanned growth in the County.	The alternative scenario has been re- jected as it does not indicate the find- ings of the Suffolk Waste Study (2017). The SWS indicates that LACW arisings will potentially rise to 0.470 Mt per annum in 2036 from 0.397Mt in 2015, and the Policy re- flects this upper scenario. For this reason, the alternative has been re- jected.



Policy	Reasons for Selection	Alternative	Reasons for Rejection
Policy WP2	Sizewell A Nuclear Power Sta- tion is currently undergoing de- commissioning. This involves the treatment and temporary storage of radioactive waste. The reactor has been de-fuelled already with the fuel being trans- ported off site to Sellafield. Other less radioactive materials remain on site. Policy WP16 specifically refers to applications for the treatment and storage of waste at Sizewell Nuclear Power Station and has been included should proposals for the impor- tation of radioactive waste from elsewhere be submitted.	None considered rea- sonable	N/A
Policy WP3	The Policy includes relevant cri- teria for the purpose of directing waste management facilities to those areas that are potentially suitable for waste development within the County. It seeks to di- rect new development to sites that would benefit from compati- ble co-location, or are otherwise brownfield, underused or in uses that would minimise public nui- sance. For that reason, the Pol- icy has been selected.	Alternative 1: To rely on an Areas of Search process to identify broad suitable locations through a plan-led system to which all proposals must be located.	An Areas of Search based approach can be expected to give rise to some benefits regarding certainty to strate- gic waste development and conform- ity to the overall spatial strategy; how- ever it should be noted that no short- falls in capacity are identified through- out the plan period that would warrant such an approach. For that reason, the alternative has been rejected.
Policy WP4	The Plan acknowledges that HWRCs are required to be ac- cessible to the public and in close proximity to Key Centres of Population and growth. The Policy ensures that future de- mand is likely to be met through outlining exceptions to those broad sites included within Pol- icy WP3 and has been included as a result.	Alternative 1: To de- lete the policy	The Alternative scenario would see HWRCs directed to land as per Policy WP3, however in reflection of a stra- tegic need for such facilities to meet any future planned or un-planned growth in the County, the alternative has been rejected in order to set our exceptions as to potential future deliv- ery. The Policy approach indicates that household waste recycling cen- tres may be acceptable on other sites (i.e. those not specific to Policy WP3) provided these are consistent with



Policy	Reasons for Selection	Alternative	Reasons for Rejection
			Policy GP4 and are accessible to the public.
Policy WP5	The Plan states that, '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 an- aerobic conditions forming which can give rise to odours.' For that reason a specific Policy as to the locational criteria of open wind- row compositing facilities is in- cluded within the Plan.	Alternative 1: the Pre- ferred Options ap- proach of allowing the principle of open windrow composting facilities at landfill sites, with a criteria- based approach re- garding environmen- tal impacts, the prox- imity principle and de- lays in restoration.	The Alternative has been rejected in favour of an approach that does not allow the extension of operational timeframes at landfill sites, regardless of any exception criteria. This ensures that landfill operations and importantly restoration proposals are not delayed.
Policy WP6	The Plan states that, '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 atmos- phere via bio-filters that remove odours.' For that reason a spe- cific Policy as to the locational criteria of in-vessel compositing facilities is included within the Plan.	Alternative 1: To not allow such facilities to be co-located at land- fill sites	The Alternative has been rejected in favour of an approach that allows the temporary co-location of facilities with similar waste streams and similar so- cial impacts.
Policy WP7	The Plan states that, 'Anaerobic digestion facilities promote an- aerobic degradation of organic wastes such as animal wastes, energy crops, and vegetable tail- ings. The process involves in- troducing 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	Alternative 1: To not allow such facilities to be co-located at land- fill sites	The Alternative has been rejected in favour of an approach that allows the temporary co-location of facilities with similar waste streams and similar so- cial impacts.



Policy	Reasons for Selection	Alternative	Reasons for Rejection
	advantage of this over compost- ing is that electrical power is pro- duced.' For that reason a spe- cific Policy as to the locational criteria of anaerobic digestion fa- cilities is included within the Plan.		
Policy WP8	The Plan states that, 'The recy- cling of construction, demolition of excavation waste makes a significant contribution to meet- ing aggregates demand and lessen pressure on land won and marine dredged sources. Although a sustainable source of aggregates the local environ- mental impacts of the recycling sites are akin to traditional quar- ries.' For that reason a specific Policy as to the locational criteria of anaerobic digestion facilities is included within the Plan.	Alternative 1: the Pre- ferred Options ap- proach of allowing the principle of proposals for recycling or trans- fer of inert and con- struction, demolition and excavation waste facilities at landfill sites, with a criteria- based approach re- garding environmen- tal impacts, the prox- imity principle and de- lays in restoration.	The Alternative has been rejected in favour of an approach that does not allow the extension of operational timeframes at landfill sites, regardless of any exception criteria. This ensures that landfill operations and importantly restoration proposals are not delayed.
Policy WP9	The Plan states that, 'The main function of a waste transfer facil- ities is to facilitate the efficient transportation of waste by sort- ing loads from small collection vehicles such as skip lorries and reloading onto much larger lor- ries including articulated lorries for onward transportation. Mate- rials recycling facilities are where recyclable wastes are separated into their different types for onward transportation to recyclers. The remaining waste called residual waste is ei- ther sent to landfill or a treat- ment facility such as an energy from waste facility. End of life vehicle facilities remove poten- tial pollutants from vehicles, re- move the usable parts and sent the scrap items off to recyclers.	None considered rea- sonable	N/A



Policy	Reasons for Selection	Alternative	Reasons for Rejection
	Electronic equipment recovery facilities sell on the products for re-use, recycle or deposal.' For the reason that such a Policy moves the treatment of waste up the waste hierarchy, a specific Policy as to the locational criteria of such facilities is included within the Plan.		
Policy WP10	The Plan states that, 'Energy from Waste (EfW) is one such (residual waste treatment) tech- nology, which involves the con- trolled combustion of waste and the use of the waste heat for electricity generation and some- times a district heating system. Many much EfW smaller sys- tems use waste to supply heat to help dry out other wastes such as plasterboard. Another tech- nology is Mechanical and Bio- logical Treatment (MBT) whereby waste is macerated and placed in a large hall and turned by a bucket wheel. This composting has the effected of reducing the volume by 50% or more and reducing the biodegra- dation potential of the residue.' For the reason that such a Pol- icy moves the treatment of waste up the waste hierarchy, a specific Policy as to the loca- tional criteria of such facilities is included within the Plan.	Alternative 1: To only consider residual waste treatment facili- ties with a capacity of less than 100,000 tonnes annual throughput.	The alternative has been rejected due to the scenario not allowing small fa- cilities that cover the various residual waste treatment technologies. Due to the benefits of such treatment (alt- hough it should be noted that it is not preferable to recycling and composit- ing), it would not be prudent to limit operation size. Further, any potential perceived impacts arising from such treatment would be minimal from smaller facilities that are co-located or temporary.
Policy WP11	The Plan states that, <i>'proposals</i> for the disposal of inert waste are important for the restoration of former minerals workings. It can allow a much more satisfac-	Alternative 1: To de- lete the policy in line with moving such waste up the waste hierarchy.	The alternative, although seeking to move waste up the waste hierarchy, would not allow the restoration of for- mer minerals workings and has been rejected as a result.
	tory landform to be achieved and provide a more suitable growing medium on sites where soils are	Alternative 2: To ac- cept no landraising proposals in favour of	The alternative represents a more re- strictive approach to landraising, max- imising the potential for restoring



Policy	Reasons for Selection	Alternative	Reasons for Rejection
	<i>very thin or of poor quality.</i> ' For this reason, a 'locational criteria based' Policy has been included within the Plan.	transporting material to restore mineral voids to original lev- els.	landscapes to original levels. Despite this however, this approach will likely lead to the added transportation of waste to fill such voids and could be seen to restrict recycling or re-use should commitments be made to re- store in this regard. For this reason, the alternative has been rejected.
Policy WP12	The Plan states that, 'even though such proposals are much rarer than in the past due to raised levels of recovery, pro- posals for the disposal of non- hazardous waste by landfilling or landraising may be made in con- nection with existing non-haz- ardous sites.' For this reason, a Policy that sets out the neces- sary criteria for additional void space or areas of landraising for the deposit of non-hazardous or hazardous waste has been in- cluded for Plan flexibility.	Alternative 1: To de- lete the policy in line with moving such waste up the waste hierarchy	The Plan includes such a policy to en- sure flexibility in being able to dispose of non-hazardous and hazardous waste by landfilling of landraising should no alternative form of waste management be made available to meet the need. For that reason, the alternative has been rejected.
		Alternative 2: To accept no landraising proposals in favour of transporting material to restore mineral voids to original lev- els.	The alternative represents a more re- strictive approach to landraising, max- imising the potential for restoring landscapes to original levels. Despite this however, this approach could lead to the added transportation of waste to fill such voids and could be seen to restrict recycling, composting or recovery. For this reason, the alter- native has been rejected.
Policy WP13	The Plan states that, 'the mining or excavation of putrescible and/or inert waste has the po- tential 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 excava- tion are justified.' For this rea- son, a 'criteria based' Policy has	Alternative 1: To not have a policy on the mining or excavation of landfill waste.	The alternative has been rejected as the general Policy WP3 criteria (as would apply were there not a specific Policy on the minimising or excava- tion of landfill waste within the Plan) can not be seen as appropriate spe- cifically to this type of waste manage- ment activity.



Policy	Reasons for Selection	Alternative	Reasons for Rejection
	been included within the Plan in order to minimise such impacts.		
Policy WP14	The Plan states that, 'with in- creasing populations and water quality standards there is contin- uing investment being made into waste water treatment. Alt- hough changes made to permit- ted development rights have sought to remove the need for planning applications for very small developments there are still applications that need to be determined.' For this reason, a specific Policy on waste water treatment is included within the Plan.	None considered rea- sonable	N/A
Policy WP15	The Plan states that, 'hazardous waste travels considerable dis- tances to specialised facilities so that the Country is truly interde- pendent. Volumes are small compared to the main waste streams.' For this reason, Policy as to the storage, processing & treatment of hazardous waste is included within the Plan in order to reduce and maintain low lev- els of 'waste miles' for this waste stream.	None considered rea- sonable	N/A
Policy WP16	The Plan states that, 'Sizewell A Nuclear Power Station had two Magnox reactors and generated electricity between 1966 and 2006. Sizewell A is currently un- dergoing decommissioning. The most recent waste related plan- ning application determined was for a Fuel Element Debris (FED) facility. Sizewell B Nuclear Power Station has a single Pres- surised Water Reactor (PWR) and started generating electricity in 1995 and is planned to	Alternative 1: Permis- sion for nuclear or ra- dioactive waste treat- ment or storage will not be favoured and the Councils will seek to ensure that any nu- clear wastes continue to be disposed of and/or reprocessed at appropriate national facilities	The alternative has been rejected as it would not seek to reduce and main- tain low levels of 'waste miles' for this waste stream regarding its initial treat- ment and storage.


Policy	Reasons for Selection	Alternative	Reasons for Rejection
	continue generating until 2035. The most recent waste related planning application determined was for a dry fuel store.' For this reason, Policy as to the treat- ment and storage of radioactive waste at Sizewell nuclear power stations is necessary for inclu- sion within the Plan.		
Policy WP17	Policy WP17 sets out the criteria for the consideration of the de- sign of waste management facili- ties. This policy is important particularly when large facilities such the Energy from Waste Fa- cility at Gt Blakenham are planned, because such a large building is a significant feature in the landscape and so an attrac- tive design is desirable. The Pol- icy is therefore included within the Plan to minimise such im- pacts.	None considered rea- sonable	N/A
Policy WP18	The safeguarding of waste sites is necessary to protect them from other forms of development which might either directly in in- directly impact upon waste de- velopment. Likewise, applica- tions for new development in the proximity to existing or proposed waste development should take into account any potential con- flicts. For this reason, the Policy is included within the Plan.	Alternative 1: To safe- guard all existing per- manent permissions only.	The alternative has been rejected as it does not consider the importance of the Plan's waste allocation of Sizewell A Nuclear Power Station for the man- agement of waste arising from the de- commissioning of Sizewell A together with other waste from sister stations in accordance with national policy to share waste facilities. The Plan does not identify a waste capacity gap, and thus it is important that existing and allocated, temporary and permanent sites of all scales are safeguarded in order to ensure no incompatible de- velopment occurs that could give rise to a need for new facilities to be re- quired within the plan period.
		Alternative 2: To safe- guard all existing per- manent permissions and site allocations	The Plan does not identify a waste capacity gap, and thus it is important that existing and allocated, temporary and permanent sites of all scales are



Policy	Reasons for Selection	Alternative	Reasons for Rejection
		with a size/capacity of strategic importance only.	safeguarded in order to ensure no in- compatible development occurs that could give rise to a need for new facil- ities to be required within the plan pe- riod.

5.1.4 Waste Management Facilities

Site	Preferred / Re- jected?	Reasons for Selection / Rejection
CA2	Preferred	There are no overriding constraints to the development of the site and the pro- posal forms part of a co-located facility at Cavenham which limits potential wider impacts on the public.
CA3	Preferred	There are no overriding constraints to the development of the site and the pro- posal forms part of a co-located facility at Cavenham which limits potential wider impacts on the public.
WS1	Preferred	The Plan proposal relates to the management of waste arising from the de- commissioning 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 pro- posals 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.
BM1	Rejected	The site has been rejected at this stage as the proposed access arrangements are considered unsuitable.
BE1	Rejected	The proposal has been rejected as the proposed access arrangements are un- suitable for lorries.
GB1	Rejected	The development of this site would result in the loss of a Site of Special Scien- tific Interest and a large area of a County Wildlife Site. There are no firm pro- posals that have been submitted at this stage to be able to assess the poten- tial impacts. If and when firm proposals have been developed they should be assessed against the criteria based policies to be included in the Plan.
TA1(b)	Rejected	There is no justification for the permanent retention of waste recycling opera- tions beyond the life of landfill operations in the open countryside that is also designated as a Special Landscape Area.



5.1.5 Minerals Extraction Sites

Site	Preferred / Re- jected?	Reasons for Selection / Rejection
BA1	Preferred	These 2 sites were previously included in the Suffolk Minerals Specific Site Al- locations DPD but no planning application was received due to the prevailing economic conditions. There are no overriding constraints to the development of these sites.
BN1	Preferred	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 was not required for the A11 construction.
		Triangular Plantation, the river valley between Triangular Plantation and the dismantled railway, and the parcel north of Elveden Road should all be excluded from further consideration. This is because of the potential impacts upon landscape, ecology, public rights of way, and archaeology. These constraints reduced the area under consideration to that which is depicted on the Constraints Map.
		Additional geological testing carried out since the submission of the original geological testing has revealed no economic sand and gravel reserves under Hunwellspring Plantation, the two fields to the south of Hunwellspring Plantation and the field to the north of Triangular Plantation. These supplementary geological results reduced the area under consideration. There are no overriding constraints to the development of the remaining areas.
BS1	Preferred	There are no overriding constraints to the development of the site.
CA1	Preferred	There are no overriding constraints to the development of the site. Adequate mitigation will however be required to make the proposed development acceptable.
LA1	Preferred	The proposed development represents an extension to the existing long-stand- ing sand and gravel quarrying operations at Rands Hall Pit, Layham. This site was previously included in the Suffolk Minerals Specific Site Allocations DPD but no planning application was received due to the prevailing economic condi- tions. There are no overriding constraints to the development of the proposed sand quarry extension.
TA1	Preferred	The proposal is 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. There are no overriding constraints to the de- velopment of the proposed sand quarry extension.
WE1	Preferred	This site represents a proposed extension to an area currently being quarried for sand and gravel. Restoration would involve the backfilling with inert waste (mainly soils and clays) to previous ground levels. There are no overriding



		constraints to the development of the proposed sand and gravel quarry exten-
		sion or the backfilling with inert wastes.
WH1	Preferred	The proposed development represents an extension to the permitted sand and gravel quarrying operations at Pannington Hall Quarry, Wherstead. Planning permission was granted a number of years ago and the planning permission has been implemented and also renewed recently. There are no overriding constraints to the development of the proposed sand quarry extension.
WO1(a)	Preferred	The site is an extension to the existing operations at Bay Farm Quarry, Wor- lington. There are no overriding constraints to the development of the pro- posed quarry extension.
WO1(b)	Preferred	The site is an extension to the existing operations at Bay Farm Quarry, Wor- lington. There are no overriding constraints to the development of the pro- posed quarry extension.
WO1(c)	Preferred	The site is an extension to the existing operations at Bay Farm Quarry, Wor- lington. There are no overriding constraints to the development of the pro- posed quarry extension.
WA3	Rejected	The site is located within an AONB, and the NPPF provides guidance in re- spect of development within the AONB:
		b) NPPF paragraph 116 indicates that planning permission for major develop- ment (which would include sand and gravel extraction) should be refused ex- cept in exceptional circumstances and where it can be demonstrated that it is in the Public Interest.
		The site was previously allocated, however has been removed from the Plan as an allocation following the findings of the Inspector at Examination in Public (EiP).
HE1(a)	Rejected	There is an overriding constraint to the site in the form of an unacceptable im- pact upon an AONB.
HE1(b)	Rejected	There is an overriding constraint to the site in the form of an unacceptable im- pact upon an AONB.
HE1(c)	Rejected	The site has an unsuitable access with a poor accident record and the cost of rectifying the junction is likely to be prohibitive. Parts of the site would also have an unacceptable impact upon an AONB.
HG1	Rejected	The site has been rejected as it is considered that the proposed access ar- rangements to and from the A12 are unacceptable in terms of highway safety as the existing slip roads are substandard and are unlikely to be able to be im- proved without considerable expense beyond the scope of this proposed site. In addition, no case has been made to allow working with the Dedham Vale Area of Outstanding Natural Beauty.
HO1	Rejected	The western part of the site would have an unacceptable impact upon the ad- jacent AONB. Additionally there was an unacceptable lack of geological



		information and inadequate information regarding the site access arrange- ments submitted.
ME1	Rejected	The proposal has been rejected as there are overriding constraints to the de- velopment of this site in terms of highways, landscape, ecology and archaeol- ogy.
ST1	Rejected	The site was rejected as, after having taken into account all of the site con- straints, there is considered insufficient land suitable to provide a viable miner- als resource.
WA1	Rejected	Hill Farm would have an unacceptable impact upon the AONB, Henham Park and potentially also the adjacent site of local nature conservation interest
WA2	Rejected	The Southern Extension would have an unacceptable impact upon the AONB and potentially also the adjacent sites of international, European, national and local nature conservation interest.
WD1	Rejected	The site proposal has been rejected as significant constraints have been iden- tified in terms of ecology, archaeology, landscape and amenity.



6. The Measures to be taken to monitor the significant environmental effects of the Plan

6.1 Introduction

The significant sustainability effects of implementing a Local Plan must be monitored in order to identify unforeseen adverse effects and to be able to undertake appropriate remedial action. The Sustainability Framework devised for the appraisal of the SMWLP included suggested indicators in order to monitor each of the Sustainability Objectives. It should be noted however that these may not all be collected due to limited resources and difficulty in data availability or collection.

Guidance stipulates that it is not necessary to monitor everything included within the Sustainability Framework, but that monitoring should focus on significant sustainability effects, e.g. those that indicate a likely breach of international, national or local legislation, that may give rise to irreversible damage or where there is uncertainty and monitoring would enable preventative or mitigation measures to be taken.

This Section looks at the effects highlighted in the SA of the SMWLP, and also includes information of both those monitoring indicators identified in the SA and those that are collected by SCC as the Minerals & Waste Planning Authority.

6.2 Summary of Effects of the SMWLP identified in the SA

The below sub-sections outline the 'whole Plan' effects highlighted within the SA of the SMWLP as adopted, re-iterating the conclusions that were initially presented within the SA of the Modifications to the SMWLP post-EiP, in 2019. Whole Plan conclusions were included within the SA of the Modifications document to reflect both the Modifications alongside the unchanged elements of the Plan at the Regulation 19 stage.

As such, the below reflects the effects of the SMWLP as adopted. It should be noted that no 'significant' negative effects on environmental, social or economic tenets of sustainability were highlighted as likely to occur from the implementation of the final SMWLP.

6.2.1 Surface water and groundwater

• The Plan has been identified as having **negative impacts** on groundwater associated with the allocation of a number of sites within Source Protection Zones. Impacts are not significant however, through such requirements to address such impacts being prevalent in relevant site allocation policies.

6.2.2 Water use

• There are **no impacts** emanating from the Plan regarding the sustainable use of water resources. It is considered that this issue is more relevant to the operation of permanent facilities and the detailed planning applications submitted to the Minerals and



Waste Planning Authority.

6.2.3 Soil quality

• The Plan does not make any significant commitments to the protection of the best and most versatile agricultural land and as such there will be **uncertain impacts** at this stage. This is understandable however, where mineral deposits lie where they exist and in consideration of the constraints within the County surrounding ecological designations such as SSSIs and inland Natura 2000 sites.

6.2.4 Landscapes

- The Plan's policies will have **positive long term outcomes** regarding landscapes and biodiversity, due to the enhancements that are encouraged through such activities in the long term associated with aspirations regarding restoration.
- A number of negative impacts are associated with the Plan's site allocations regarding Special Landscape Areas. For this reason, **negative effects** can not be ruled out at this stage. It should be noted however that a number of the site allocation policies include specific measures as to the mitigation measures needed for each allocation, where relevant.

6.2.5 Energy efficiency

• There are **no impacts** emanating from the Plan regarding energy efficiency. It is considered that this issue is more relevant to the operation of permanent facilities and detailed planning applications submitted to the Minerals and Waste Planning Authority.

6.2.6 Biodiversity / geodiversity

In the absence of any specific policy regarding biodiversity that sets out the requirements for forthcoming applications, uncertain impacts arise from the Plan's policies in general. Regarding sites, negative impacts can not be ruled out cumulatively following a precautionary approach adopted in this SA regarding the assessment of such environmental effects. The Plan's Habitats Regulation Assessment (HRA) does not highlight any likely significant effects on Natura 2000 sites, provided that project-level HRA is undertaken on a number of qualifying sites. This is pertinent in additional consideration of high growth in the County in line with the need for district level development plans to objectively assess their housing needs; there could be some significant in-combination effects as a result.

6.2.7 The historic environment

• The protection of the historic environment is sought within the Plan's general environmental criteria policy (GP4) and is a key consideration in the selection of sites as demonstrated in a series of Site Assessment Reports that form part of the Plan's evidence base. The SA identifies a number of positive impacts within the assessment of



the Plan's policies, however many of these can be considered secondary. The Plan at this stage introduces a number of site allocation specific requirements regarding archaeology, however further work might be required of developers in submitting planning applications that identifying and where relevant mitigate impacts on historic assets and their settings. As such there are **uncertain impacts** as a result of the Plan as a whole.

6.2.8 Flood risk

• The Plan does not specifically include a policy regarding flood risk, and as such the impacts are not considered to be significantly positive. Despite this, flood risk is included within the general environmental criteria policy (GP4) and national policy further includes a planning context as to what is and what is not acceptable. The Plan's site assessment methodology, as evidenced by Site Assessment Reports for all allocated and non-allocated sites submitted for consideration includes flood risk as a key consideration. General **positive impacts** have been highlighted for the Plan as a whole regarding minimising flood risk.

6.2.9 Traffic impacts on the environment

The Plan seeks to minimise traffic impacts on the environment and the SA identifies a number of positive impacts regarding this Sustainability Objective in the assessment of the Plan's policies. The Plan's site assessment methodology factors in expected HGV movements and the traffic impacts of each individual proposal / allocation. Further sustainable transport modes are promoted and safeguarded where necessary. There will be positive impacts resulting from the Plan as a whole on the minimisation of traffic impacts on the environment.

6.2.10 Air quality

• The Plan's policies have been identified as having uncertain impacts regarding air quality. It should be noted that this SA identifies such impacts, related to vehicle emissions specifically, as predominantly associated with the cumulative effects of co-locating waste management facilities in industrial areas, landfill sites during restoration or existing mineral extraction sites. This may see increases in HGV movements in those areas that already experience HGV movements; however these impacts should be balanced with a requirement to minimise impacts throughout the Plan and utilise existing infrastructure.

6.2.11 Restoration and after-use

• The Plan will have **significant positive impacts** on restoration and after-use by encouraging biodiversity gain and where this is not viable a return to agriculture. The Plan's allocations can be seen as having broadly positive impacts regarding aspirations surrounding restoration and after-use.

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6.2.12 Avoiding the sterilisation of mineral resources

• The Plan includes mechanisms to safeguard deposits and includes safeguarded existing facilities within the policy map. Policy exists to further safeguard the Plan's allocations. There will be **significantly positive impacts** regarding avoiding the sterilisation of mineral resources.

6.2.13 Economic use of natural resources

• **Positive impacts** have been identified throughout the Plan regarding the economic use of resources both in the nature of mineral planning and also waste, associated with a high-level focus on recycling and re-use and moving the treatment of waste up the waste hierarchy.

6.2.14 Minerals supply

 There will be significant positive impacts regarding increasing minerals supply. This is in line with the County's growth needs through a number of flexible and pragmatic policies regarding extraction. Forecasts in supply over the plan period are in alignment with the required methodologies of national guidance. The Plan's site allocations adhere to ensuring a consistent supply of minerals over the Plan period in line with the supply figure identified in Policy MP1 including a sufficient buffer or 'safety margin' of 31%.

6.2.15 The waste hierarchy

 Only a single new waste management facility (Sizewell A Nuclear Power Station) is identified within the Plan in line with there being no identified capacity gap for the treatment of many wastes in the plan area. Despite this, co-located facilities with are supported in many instances in line with the lifetime of minerals operations, including allocated waste management facilities at Cavenham. Impacts on this Sustainability Objective are not significantly positive regarding the Plan's waste management policies due to the inherent need to backfill mineral voids to restore landscapes, although it should be noted that the Plan's waste policies do seek to minimise disposal in favour of recycling and re-use in the first instance. There will be positive impacts on this objective overall.

6.2.16 Impacts on the public

• The policy appraisals in this SA indicate that there will be **no impacts** on the majority of the social objectives in line with a desire to minimise impacts in the first instance, and also promote effective co-location through a series of Policy approaches for different facility types and minerals and waste development in general. This stance on minimisation rather than avoidance reflects the fact that much mineral and waste development is likely to have some degree of perceived negative impact on where people live, is carried forward within the Plan's site allocations, with no negative impacts



highlighted within this SA and the ease of effective mitigation factored into the site selection process.

6.2.17 Meeting housing needs

The Plan rightly focuses on the interests of waste management and ensuring miner-• als supply throughout the Plan period. This primarily supports the development industry by nature, however mechanisms are included within the Plan to ensure that planned development, either minerals and waste or housing, do not significantly conflict. Whereas any minerals or waste Plan is always likely to conflict to some degree with some housing schemes due to the sustainability benefits of co-location, adherence to the proximity principle and a need to ensure effective transport movements, the Plan's allocations can be seen to not conflict with any housing proposals in any district development plans or pending / committed applications at the time of writing. Policy MP1 ensures a suitable 'safety margin' of 31% to ensure that there is a sufficient supply of sand and gravel to support any unplanned growth; this is particularly important in regard to the proposed change to the NPPF in the form of a standardised methodology for calculating housing needs in the County and nationally, which is likely to see a significant increase in housing requirements. There will be positive impacts on this Sustainability Objective at the 'whole Plan' level.

6.2.18 Noise

Positive impacts have been highlighted in the assessment of the Plan's policies re-• garding the minimisation of noise; however it should be noted that such impacts are predominantly associated with the cumulative effects of co-locating waste management facilities in industrial areas, landfill sites during restoration or existing mineral extraction sites. This is an approach that enables positive social and economic impacts by ensuring development that requires HGV movements are concentrated and can utilise existing infrastructure. Noise impacts can be considered more relevant to specific sites on a case by case basis and such impacts are identified in all relevant site allocation policies. It should also be noted that noise impacts have been a key consideration throughout the site selection process. As a result, more positive impacts can be seen to emanate from the consideration of the site allocations against the Plan's relevant policy criteria and this 'two pronged' approach to minimising noise impacts at the site selection and eventual planning application stages ensures that negative impacts are unlikely to occur through the operation of facilities or extraction activities.

6.2.19 Recreation and amenity

Policy GP4 requires applicants to demonstrate that there would be no significantly adverse impacts on Public Rights of Way or neighbouring land-uses. This goes some way to ensuring that recreation and amenity is protected throughout the Plan area from mineral and waste activities. The Plan's allocations have numerous impacts on Public Rights of Way, bridleways and by-ways that are identified on or in close proximity to any of the sites. Despite this, the Plan's site assessment methodology, as



evidenced in a number of Site Assessment Reports (for all allocated and non-allocated sites) identifies such impacts and assesses the ease of specific mitigation needed with criteria existing in site allocation policies within the Plan. There will therefore be **no impact** on recreation and amenity relevant to the context of the Plan and resulting from the Plan as a whole.

6.2.20 Human health and well-being

The assessment of the Plan's policies identifies a number of minor positive impacts regarding human health and well-being; however this is in consideration of less focused impacts due to separate Sustainability Objectives regarding air quality, noise, traffic impacts and general public nuisance. The Plan's site assessment methodology, as evidenced in an individual Site Assessment Report for each site submitted for consideration explores a number of site specific impacts that can fall within this objective on a case-by-case basis, such as the impacts of mud on road that can be caused by operations and the suitability of local access roads in terms of accident histories. Such considerations are reiterated within the Plan's site allocation policies. This approach, in addition to the list of criteria included within Policy GP4, ensures that there will be **no impact** on this Sustainability Objective.

6.2.21 Economic and employment growth

Ensuring a supply of minerals throughout the plan period significantly supports economic growth throughout the plan area. In addition, the minerals and waste industries provide a number of employment opportunities. Specifically relevant to the Plan content, there will be generally uncertain impacts regarding economic growth and investment in the County; there is a possibility that the prevalence of co-locating new waste management facilities in employment uses, however this is not a criticism of the Plan's general approach in line with national guidance. This is an inherent secondary reality associated with the benefits of co-locating new facilities however positive impacts can be associated with the Plan's allocations (and policies) that seek to locate temporary waste management facilities at mineral extraction sites and those that are being backfilled through phased restoration.

6.2.22 Maintain / improve existing infrastructure

• The Plan as a whole will not have significant impacts on maintaining and improving existing infrastructure. Whereas the Plan seeks to sustainably utilise existing infrastructure in the first instance (through co-location and directing sites to existing Strategic Lorry Routes in accordance with the Spatial Strategy of Policy GP3), and Policy exists to support infrastructure projects in the Plan area. There will be **positive impacts** on this Sustainability Objective resulting from the Plan as a whole.



6.2.23 Sustainable investment

• As stated in the conclusions regarding Sustainability Objective 21, there will be generally **uncertain impacts** regarding investment in the County. This is related to the possibility that the prevalence of co-locating new waste management facilities in employment areas would make investment in them less attractive for more traditional employment uses. This is not a criticism of the Plan's general approach in line with national guidance and is an inherent secondary reality associated with the benefits of co-locating new facilities.

6.2.24 Efficient / sustainable movement patterns

• The Plan's Spatial Strategy (GP3) seeks to allocate and permit mineral extraction and waste management facilities that are well related to the Suffolk Lorry Route Network (or rail network or navigation). This can be seen as a commitment that has influenced the selection of sites with allocations responding well to being in close proximity to this network. The Plan's allocations therefore relate well to this element of the Spatial Strategy and the Plan will have generally significant positive impacts as a result.

6.3 Monitoring Arrangements

6.3.1 Monitoring the SMWLP

SCC as the Minerals & Waste Planning Authority have set out a schedule of monitoring indicators within Appendix 2 (Policy Monitoring Framework) of the adopted SWMLP. These indicators are used to monitor the successfulness of the SMWLP policies.

The table below outlines the monitoring indicators included within Appendix 2 of the SMWLP as adopted.

Policy	Performance Indi- cator	Target	Monitoring Method
General Policies			
Policy GP1: Presumption in favour of sustainable development	No of times policy trig- gered		Monitoring planning de- cisions
Policy GP2: Climate change mitigation and Adaptation	No of times policy trig- gered		Monitoring planning de- cisions
Policy GP3: Spatial strategy and key diagram	No of times policy trig- gered		Monitoring planning de- cisions
Policy GP4: General environmental cri- teria	No of times policy trig- gered		Monitoring planning de- cisions

Table 5: SMWLP Policy Monitoring Framework



Policy	Performance Indi- cator	Target	Monitoring Method
Minerals Policies			
Policy MP1: Provision of sand and gravel	No of times policy trig- gered	Permitted reserves of at least 7 years	Local Aggregates As- sessment
Policy MP2: Proposed sites for sand and gravel extraction	No of times policy trig- gered	All 10 proposed sites with planning permis- sion	Monitoring planning de- cisions
Policy MP3: Borrow pits	No of times policy trig- gered		Monitoring planning de- cisions
Policy MP4: Agricultural and public supply reservoirs	No of times policy trig- gered		Monitoring planning de- cisions
Policy MP5: Cumulative environmental impacts and phasing of workings	No of times policy trig- gered		Monitoring planning de- cisions
Policy MP6: Progressive working and restoration	No of times policy trig- gered		Monitoring planning de- cisions
Policy MP7: Aftercare	No of times policy trig- gered		Monitoring planning de- cisions
Policy MP8: Concrete batching plants and asphalt plants	No of times policy trig- gered		Monitoring planning de- cisions
Policy MP9: Safeguarding of port and rail facilities, and facilities for the manufacture of concrete and asphalt	No of times policy trig- gered	No loss of sites due to safeguarding issues	Monitoring planning de- cisions
Policy MP10: Minerals consultation and safeguarding areas	No of times policy trig- gered	No sterilisation of miner- als resources due to safeguarding issues	Monitoring planning de- cisions

Waste Policies

Policy WP1: Management of waste	No of times policy trig- gered	Significant changes to patterns of waste man- agement	Monitoring planning de- cisions
Policy WP2: Proposed site for waste management	No of times policy trig- gered	Planning permission on proposed site	Monitoring planning de- cisions
Policy WP3: Existing or designated landuse	No of times policy trig- gered		Monitoring planning de- cisions



Policy	Performance Indi- cator	Target	Monitoring Method
Policy WP4: Household waste recy- cling centres	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP5: Open air composting	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP6: Enclosed composting fa- cilities	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP7: Anaerobic digestion	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP8: Proposals for recycling or transfer of inert and construction, dem- olition and excavation waste	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP9: Waste transfer stations, materials recycling facilities, end of life vehicle facilities and waste electrical and electronic equipment recovery fa- cilities	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP10: Residual waste treat- ment facilities	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP11: Approval of sites for dis- posal of inert waste by landfilling or landraise	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP12: Approval of sites for dis- posal of non-hazardous waste by land- filling or landraise	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP13: Mining or excavation of landfill waste	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP14: Waste water treatment	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP15: Transfer, storage, pro- cessing & treatment of hazardous waste	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP16: Treatment and storage of radioactive waste at Sizewell nu- clear power stations	No of times policy trig- gered		Monitoring planning de- cisions



Policy	Performance Indi- cator	Target	Monitoring Method
Policy WP17: Design of waste man- agement facilities	No of times policy trig- gered		Monitoring planning de- cisions
Policy WP18: Safeguarding of waste management sites	No of times policy trig- gered	No loss of sites due to safeguarding issues	Monitoring planning de- cisions
Minerals Sites			
Policy MS1: Barham	Policy triggered	Planning permission granted	Monitoring planning de- cisions
Policy MS2: Barnham	Policy triggered	Planning permission granted	Monitoring planning de- cisions
Policy MS3: Belstead	Policy triggered	Planning permission granted	Monitoring planning de- cisions
Policy MS4: Cavenham	Policy triggered	Planning permission granted	Monitoring planning de- cisions
Policy MS5: Layham	Policy triggered	Planning permission granted	Monitoring planning de- cisions
Policy MS6: Tattingstone	Policy triggered	Planning permission granted	Monitoring planning de- cisions
Policy MS8: Wetherden	Policy triggered	Planning permission granted	Monitoring planning de- cisions
Policy MS9: Wherstead	Policy triggered	Planning permission granted	Monitoring planning de- cisions
Policy MS10: Worlington	Policy triggered	Planning permission granted	Monitoring planning de- cisions
Waste Sites			
Policy WS1: Sizewell	Policy triggered	Planning permission granted	Monitoring planning de- cisions

6.3.2 The SA Monitoring Indicators

Planning Practice Guidance on Sustainability Appraisal states at Paragraph 25 that the significant environmental effects of implementing a plan which has been subject to Sustainability Appraisal should be monitored (as required by Regulation 17 of the Environmental Assessment of Plans and Programmes Regulations 2004). This will enable any unforeseen adverse effects to be identified at an early stage and to enable appropriate remedial actions. Details of monitoring arrangements may



be included in the sustainability appraisal report, the post-adoption statement or in the local plan itself. The monitoring results should be reported in the local planning authority's Monitoring Report.

As previously outlined, the SA of the SMWLP did not identify any 'significant' negative effects that would require specific and focused monitoring as required by the SEA Directive and to be set out in this Adoption Statement. Therefore, there is no legal responsibility, as outlined within Regulation 17 of the Environmental Assessment of Plans and Programmes Regulations 2004, for any additional monitoring to be undertaken by SCC as the Minerals & Waste Planning Authority. Should SCC however wish to monitor the wider environmental effects of the SMWLP, the following framework is included to act as a basis for suitable indicators.

Table 6: Suggested Monitoring Indicators related to SMWLP effects, as identified within the SA

SA Objective / theme	Significant negative ef- fect highlighted in SA?	Key indicators
1. To maintain or improve quality of surface water and groundwater	No	 Water quality in rivers Groundwater quality Potential effect on groundwater source protection zones Condition of water bodies (Water Framework Directive)
2. To maximise the efficient use of water	No	 Water use figures from Anglian Water/Essex & Suffolk Water Resource availability status for units of groundwater in Catchment abstraction Use of recycled water on waste sites.
3. To maintain/improve soil quality/resources	No	 Map/data showing soil quality Area (hectares) of contaminated land returned to beneficial use Number and percentage of new development completed on greenfield land. No. of waste management sites on greenfield land. Waste management sites/development on best agricultural land.
4. To maintain/ improve the quality and local distinctive- ness of landscapes/ town- scapes	No	 Changes in landscape (Landscape Character Assessment)Area of designated landscape (SLAs & AONBs and The Broads) Number of TPOs affected Number of field boundaries affected



SA Objective / theme	Significant negative ef- fect highlighted in SA?	Key indicators
		 Light pollution Number of planning applications refused for reasons due to poor design Amount of new development in AONB/National Park/Heritage Coast with commentary on likely impact. Access and green infrastructure: Percentage of the city's population having access to a natural greenspace within 400 metres of their home. Length of greenways constructed. Hectares of accessible open space per 1000 population.
5. To reduce greenhouse gas emissions and enhance en- ergy efficiency	No	 Consumption of electricity - Domestic use per consumer and total commercial and in- dustrial use. Consumption of energy. Use of low carbon technologies. Location to maximize tonnes per miles. Opportunities for utilizing renewable or low- carbon energy supply systems.
6. To conserve/enhance bio- diversity or geodiversity	No	 Change in number and area of designated ecological sites. Condition of CWS (National Indicator 197). Development proposals affecting protected species outside protected areas. Achievement of Habitat Action Plan targets. Achievement of Species Action Plan targets. Development proposals affecting habitats outside protected areas. Bird survey results. Reported condition of ecological SSSIs. Number of planning approvals that generated any adverse impacts on sites of acknowledged biodiversity importance.



SA Objective / theme	Significant negative ef- fect highlighted in SA?	Key indicators
		• Percentage of major developments generat- ing overall biodiversity enhancement.
		Hectares of biodiversity habitat delivered through strategic site allocations.
7. To preserve or enhance the historic environment, his- torical buildings/sites, archae- ological sites and other cultur- ally important buildings	No	 Number of listed buildings at risk Area of historic parks & gardens Size, condition and number of Conservation Areas Buried archaeology as listed in NMR or HER Areas of significant archaeological and paleo-environmental potential Number of conservation area appraisals completed and enhancement schemes im- plemented Buried archaeology as listed in the NMR or HER or considered to be likely within a par- ticular site by the County Archaeologist and/or Historic England. Minerals & Waste applications submitted and refused due to adverse impact to the Historic Environment Minerals & Waste applications submitted and refused due to adverse impact to the Historic Environment
		 and allowed with conditions relating to the Historic Environment Site allocations supported or opposed by Historic England
8. To minimise flood risk	No	Flood Risk – Planning applications ap-
		proved against Environment Agency advice.Properties at risk of flooding from rivers.
		 Incidence of fluvial flooding (properties affected).
		Incidences of surface water flooding
		Incidences of coastal flooding
		Incidences of groundwater flooding
		SFRA results.



SA Objective / theme	Significant negative ef- fect highlighted in SA?	Key indicators
9. To minimise effects of traf- fic on the environment	No	 Location to maximize tonnes per miles Location of Strategic Lorry Routes Percentage of journeys to work undertaken by sustainable modes
10. To maintain/ improve air quality	No	 Achievement of emission limit values Number of AQMAs and dwelling affected Number of days of air pollution Operational impact on air quality
11. Promote effective restora- tion and appropriate after-use of sites	No	Restoration and after use of minerals sites
12. Avoid sterilisation of min- erals resources	No	 Minerals resources within the county and extend of sterilisation Planning mechanisms
13. Promote sustainable eco- nomic use of natural re- sources	No	 Minerals resources consumption Protection of best and most versatile agri- cultural lands Soil contamination
14. Ensure a steady and ade- quate supply of minerals to meet the needs of the society	No	Supply of minerals
15. To move treatment of waste up the waste hierarchy	No	Tonnage of household waste produced and recycled
16. To minimise the impacts arising from the minerals and waste developments on where people live	No	 Noise levels Dust levels Number of human receptors Complaints relating to noise, dust and odour (Districts Environmental Health officers and SCC) Fly tipping statistics (SCC) Light pollution maps
17. To meet the housing needs of the population	No	Supply of minerals



SA Objective / theme	Significant negative ef- fect highlighted in SA?	Key indicators
		 Noise levels Dust levels Number of human receptors Complaints relating to noise, dust and odour (Districts Environmental Health officers and SCC) Fly tipping statistics (SCC) Light pollution maps
18. To minimise production of noise at quarries	No	Noise levels
19. To maintain and improve recreation and amenity	No	 Access to recreation facilities and opportunities Restoration and after-use of sites that contributes towards recreational opportunities
20.To protect and enhance human health and wellbeing	No	 Human health and safety Play and open space quality, quantity and accessibility Percentage of residents who are happy with their neighbourhood as a place to live Change in provision of open space Change in existing outdoor play space provision
21. To achieve sustainable levels of prosperity and eco- nomic growth and offer every- one an opportunity for em- ployment	No	 Number and percentage of businesses by industry type in key sectors. Value of minerals and waste development industry within the county Investment in innovation technologies within waste and minerals industry Amount of waste treated within county Employment land availability Amount of waste exported
22. To maintain/improve ex- isting infrastructure	No	 Communications links, utilities and transport infrastructure routes. Use of local materials,



SA Objective / theme	Significant negative ef- fect highlighted in SA?	Key indicators
		 Use of low embedded energy materials. Mineral Resources identified Suffolk Minerals Core Strategy.
23. Promote sustainable in- vestment in the County	No	 Level of investment Number/percentage employed in minerals and waste sector
24. To promote efficient movement patterns in the County (where possible)	No	 Transport movements No of developments where a green travel plan is submitted/condition of development

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