

3. METHODOLOGY

This Section sets out the methodology used to assess the NEC AAP Issues and Options 2019 consultation document. Government guidance and advice from statutory consultees sets out a five-stage process (A-E) for undertaking SEA in order to meet the requirements of the SEA Regulations (Table 1).

Table 1: SA Key Tasks

SA Stage	Purpose of the SA Stage
Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope (scoping)	
A1: Identifying other relevant policies, plans and programmes and sustainability objectives	To document how the plan is affected by outside factors and suggest ideas for how any constraints can be addressed.
A2: Collecting baseline information	To provide a baseline evidence base of information about the district in order to identify sustainability issues, predict effects and monitor significant effects.
A3: Identifying sustainability issues and problems	To help focus the SA and streamline the subsequent stages, including baseline information analysis, setting of the SA framework, prediction of effects and monitoring.
A4: Developing the SA framework	To provide a framework of objectives and questions by which the sustainability of the plan can be tested.
A5: Producing scoping report and consulting on the scope of the SA	To consult with statutory bodies with social, environmental, or economic responsibilities to ensure the appraisal covers the key sustainability issues.
Stage B: Developing and refining options and assessing effects	
B1: Testing the plan objectives against the SA framework Current stage of the SA	To ensure that the overall objectives of the plan are in accordance with sustainability principles.
B2: Developing the plan options Current stage of the SA	To assist in the development and refinement of the Local Plan options, by identifying potential sustainability effects of options
B3 and B4: Predicting and evaluating the effects of the plan	To predict the significant effects of the plan and assist in the refinement of the plan.
B5: Considering ways of mitigating adverse effects and maximising beneficial effects	To ensure that all potential mitigation measures and measures for maximising beneficial effects are considered.
B6: Proposing measures to monitor the significant effects of implementing the plan	To detail the means by which the sustainability performance of the plan can be assessed.

SA Stage	Purpose of the SA Stage
Stage C: Preparing the SA Report	
C1: Preparing the SA Report	To provide a detailed account of the SA process.
Stage D: Consulting on the draft plan and SA Report	
D1: Public participation on the preferred options of the plan and the SA Report	To provide the public and statutory bodies with an early and effective opportunity to express their opinion on the SA Report and to use it as a reference point when commenting on the plan.

3.1 Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope (scoping)

The detailed methodology used for Stage A along with the findings of this stage are set out within the CNF AAP SA Scoping Report which can be accessed at:

<https://www.cambridge.gov.uk/media/2695/cnfe-aap-io-scoping-report.pdf>.

The main output of Stage A was an SA Framework which has drawn on the objectives of other relevant plans, policies and programmes and key sustainability issues identified within the review of baseline data. This framework is presented in Table 2. The Scoping Report also provided the baseline information for the AAP. This has been updated and included in Section 4 of this report.

Ramboll has used the information gathered during Stage A to undertake an evidence-based appraisal of the options. Where data has not been available, this has been identified within Section 3.5.

The SA Framework sets out objectives and decision-aiding questions against which to appraise the NEC AAP and its alternatives. To maintain consistency with the Local Plans the SA framework for the SA of the NEC AAP has been based on the SAs of the South Cambridgeshire Local Plan and the Cambridge Local Plan and has been adapted to reflect the issues faced by the AAP. Table 5.1 of the SA Scoping Report (see link above) sets out the process followed in developing the final SA Framework for the NEC AAP. A check of the SA framework has been undertaken to ensure that it still addresses the significant issues given the change to the boundary of the area to include the Science park. This has not required any changes to the SA Framework.

The SA Framework also incorporates objectives and decision-aiding questions which reflect the needs of Equalities Impact Assessment (EqIA) and Health Impact Assessment (HIA). This will be a separate document which will be produced to accompany the AAP.

Table 2: SA Framework for NEC AAP

SA Objective	Proposed Sub-Objective / Decision-aiding questions
Land	
1. Minimise the irreversible loss of undeveloped land, protect soils and economic mineral reserves.	<p>Will it use land that has been previously developed?</p> <p>Will it use land efficiently?</p> <p>Will it minimise the degradation/loss of soils due to new development?</p> <p>Will it avoid the sterilisation of economic mineral reserves?</p> <p>Will it promote resource efficiency and recycling?</p>
Environmental quality and pollution	
2. Improve air quality and minimise or mitigate against sources of environmental pollution	<p>Will it maintain and improve air quality around the AAP and along the routes to the City including the A14?</p> <p>Will it ensure that dust pollution does not affect sensitive receptors?</p> <p>Will it minimise, and where possible improve on, unacceptable levels of noise pollution, and vibration?</p> <p>Will it minimise odour impacts?</p> <p>Will it remediate contaminated land?</p>
3. Protect and where possible enhance the quality of the water environment	<p>Will it ensure that groundwater is protected?</p> <p>Will it enhance surface water features including the quality of water entering the First Public Drain and the River Cam?</p>
Biodiversity, flora and fauna	
4. Avoid adverse effects on designated sites and protected species	<p>Will it conserve protected species (including Jersey Cudweed) and protect sites designated for nature conservation interest (including Local Nature Reserves and Wildlife Sites), and geodiversity?</p>
5. Maintain and enhance the range and viability of characteristic habitats and species and improve opportunities for people to access and appreciate wildlife and green spaces	<p>Will it deliver net gains in biodiversity?</p> <p>Will it reduce habitat fragmentation, maintain and enhance connectivity between existing green and blue infrastructure and enhance key native habitats?</p> <p>Will it help deliver habitat restoration (helping to achieve Biodiversity Action Plan Targets)?</p> <p>Will it improve access to wildlife and green spaces, through delivery of and access to green infrastructure?</p>
Landscape, townscape and cultural heritage	
6. Maintain and enhance the diversity and local distinctiveness of landscape and	<p>Will it maintain and enhance the distinctiveness of landscape character, and the character of the Cambridge Green Belt?</p> <p>Will it maintain and enhance the diversity and distinctiveness of townscape character?</p>

SA Objective	Proposed Sub-Objective / Decision-aiding questions
townscape character	<p>Will it ensure the scale of development is sensitive to the existing key landmark buildings and low lying topography of the City?</p> <p>Will it protect the historic environment through appropriate design and scale of development?</p> <p>Will it lead to developments built to a high standard of design and good place making that reflects local character?</p>
Climate change	
7. Minimise impacts on climate change (including greenhouse gas emissions)	<p>Will it ensure deployment of energy efficiency and renewable energy technologies?</p> <p>Will it minimise contributions to climate change through sustainable construction practices?</p>
8. Reduce vulnerability to future climate change effects.	<p>Will it protect and enhance existing natural flood risk management infrastructure?</p> <p>Will it ensure that suitable sustainable drainage measures are incorporated into developments in order to manage surface water runoff?</p> <p>Will it provide green and blue infrastructure which will help reduce climate change impacts locally?</p> <p>Does it include measures to adapt to climate change in ways that do not increase greenhouse gas emissions including giving consideration to the layout and massing of new developments?</p>
Human health and well being	
9. Maintain and enhance human health and wellbeing, and reduce inequalities	<p>Will it promote good health and encourage healthy lifestyles?</p> <p>Will it help address levels of deprivation in north and east Cambridge?</p> <p>Will it reduce inequalities in health in the north and east of Cambridge?</p>
10. Improve the quantity and quality of publicly accessible open space.	<p>Will it increase the quantity and quality of publicly accessible open space?</p> <p>Will it protect and enhance community, leisure and open space provision, particularly in East Chesterton ward?</p> <p>Will it maintain and enhance open spaces and green space within the urban area and the Green Belt setting?</p>
11. Ensure everyone has access to decent, appropriate and affordable housing	<p>Will it support the provision of a range of housing types to meet identified needs?</p>
Economy and infrastructure	
12. Redress inequalities related to age, disability, gender,	<p>Will it improve relations between people from different backgrounds or social groups and contribute to community diversity?</p> <p>Will it ensure equal access for all?</p>

SA Objective	Proposed Sub-Objective / Decision-aiding questions
race, faith, location and income	
13. Improve the quality, range and accessibility of services and facilities (e.g. health, transport, education, training, leisure opportunities)	<p>Will it provide accessibility to and improve quality of key local services and facilities, including health, education and leisure (shops, post offices, pubs etc?)</p> <p>Will it improve access to jobs and training for all?</p> <p>Will it encourage and enable engagement in community activities?</p>
14. Improve the efficiency, competitiveness, vitality and adaptability of the local economy	<p>Will it maintain and enhance competitiveness, and capitalise on Cambridge's position as one of the UK's most competitive cities?</p> <p>Will it provide high-quality employment land in appropriate, accessible locations to meet the needs of businesses, and the workforce?</p> <p>Will it protect the shopping hierarchy, supporting the vitality and viability of Cambridge, district and local centres?</p> <p>Will it provide appropriate office space?</p> <p>Will it minimise the loss of industrial floor space?</p>
15. Support appropriate investment in people, places, communications and other infrastructure	<p>Will it improve the level of investment in key community services and infrastructure, including communications infrastructure and broadband?</p> <p>Will it improve access to education and training for all, and support provision of skilled employees to the economy?</p>
16. Reduce the need to travel and promote more sustainable transport choices.	<p>Will it enable shorter journeys, improve modal choice and integration of transport modes to encourage or facilitate the use of modes such as walking, cycling and public transport?</p> <p>Will it encourage cycling for journeys over one mile?</p> <p>Will it discourage and reduce the use of the private car and ensure greater access to frequent public transport?</p> <p>Will it support movement of freight by means other than road?</p> <p>Will it promote infrastructure for zero emissions vehicles?</p> <p>Will it make the transport network safer for all users, both motorised and non-motorised?</p>

3.2 Stage B: Assessing the elements of the plan

This stage involves assessment of the Issues and Options 2019 consultation document against the SA framework, taking into account the evidence base. The SEA Regulations make it clear that reasonable alternatives to a plan should be identified and assessed. In addition to this, the SA report should include an outline of the reasons for "selecting the alternatives dealt with" (SCHEDULE 2, Regulation 12(3)).

The aim of this assessment is to assess the sustainability of the options. Once the draft plan has been developed it will be assessed in more detail.

However, the information presented by the councils in the Issues and Options 2019 consultation document is a mix of policy approaches, spatial options and general questions to consultees. Therefore, it is not possible to assess the effects of every element of the Issues and Options 2019 consultation document. A screening exercise has been carried out to ascertain which issues and options are possible to assess. This screening exercise is shown in Appendix 1. This screening table presents how the SA has addressed each issue.

The elements of the Issues and Options 2019 consultation document that have been assessed have been assessed in two different ways dependent on the level of detail that is possible to include in the assessment. The main purpose of the SA at this stage is on areas where genuine options are proposed and where carrying out an assessment can genuinely add value to the plan making process. Therefore, detailed assessments have been provided for spatial options (in this case the indicative concept plan) and also where options have been provided. These detailed assessments are provided in an assessment matrix (table) which sets out in detail what the effects of the different options are likely to be and provides a comparison between the options. This approach has been applied to the following elements of the Issues and Options 2019 Report:

- Indicative Concept Plan;
- Issue: Local Movement and Connectivity;
- Issue: Milton Road interface;
- Issue: Green Space Provision;
- Issue: Industrial Uses; and
- Issue: Sustainable design and construction standard.

Where policy approaches have been put forward in the Issues and Options 2019 Report these have been assessed through provision of a sustainability commentary. This approach has been applied to the following elements of the Issues and Options 2019 Report:

- Issue: AAP boundary;
- Issue: Creating a healthy community;
- Issue: Building Heights and Skyline;
- Issue: Crossing the railway line;
- Issue: Managing car parking and servicing;
- Issue: Car Mode Share;
- Issue: Car Parking;
- Issue: Cycle Parking;
- Issue: Types of Employment Space;
- Issue: Housing Mix;
- Issue: Affordable Housing;
- Issue: Custom Build Housing;
- Issue: Houses in Multiple Occupation (HMO);
- Issue: Private Rented Sector Housing;
- Issue: Other forms of specialist housing, including for older people, students & travellers;
- Issue: Quality and Accessibility of Housing;
- Issue: Site wide approaches to sustainable design and construction;
- Issue: Biodiversity; and
- Issue: SMART technology.

3.3 How does the SA define significance

The SEA Regulations specify the criteria that should be taken into account when determining likely significant effects. These criteria, which principally relate to the nature of the effects arising from the plan/plan option and the value and vulnerability of the receptors, are as follows:

- How valuable and vulnerable is the receptor that is being impacted?
- How probable, frequent, long lasting and reversible are the effects?
- What is the magnitude and spatial scale of the effect?
- Are the effects beneficial or adverse?

The assessment of significance should involve, where possible, the assessor considering the above criteria for each potential effect along with a consideration of how the plan will help to achieve (or not) the SA objectives. Table 2.3 sets out the key to the scoring system used within the detailed appraisal matrices presented in this Interim SA Report.

Table 3: Key to appraisal scoring

Symbol	Likely impact against the SA Objective
++	Potentially significant beneficial impact, option supports the objective
+	Option supports this objective although it may have only a minor beneficial impact
~	Option has no impact or effect and is neutral insofar as the benefits and drawbacks appear equal and neither is considered significant
?	Uncertain or insufficient information is available on which to determine the appraisal at this stage
-	Option appears to conflict with the objective and may result in adverse impacts
--	Potentially significant adverse impact, conflict with this objective

The term 'neutral effect' means there is no discernible beneficial or adverse effect. In some cases the policies are also not directly relevant to the SA objectives and these have been recorded as neutral. The SA has focused on identifying and recording significant impacts.

3.4 Cumulative effects

To comply with the SEA regulations, it is necessary to identify any likely significant cumulative effects of the plan. A cumulative effects assessment will be carried out once the proposals in the AAP are further developed.

3.5 Difficulties encountered during the assessment

This SA has been undertaken at a strategic level and as such, detailed data concerning a number of issues is not yet available. A number of workstreams to inform the development of the NEC AAP are yet to be completed:

- A Transport Study focussing on Ely to Cambridge has been produced. This study was completed in January 2018 and was commissioned by Greater Cambridge Partnership on the

transport schemes needed to accommodate the major development planned at a new town north of Waterbeach, Cambridge Northern Fringe and the Cambridge Science Park. Building on the recommendations of the Ely to Cambridge Study, a transport assessment is required and will explore measures required to enable development in the area and inform preparation of the AAP. Therefore, the Sustainability Appraisal scoring has not been fully completed with regards to the potential direct and indirect effects of traffic e.g. on air quality and noise impacts on the local transport network.

- A Landscape Character & Visual Impact Assessment is underway, which will be used to test the impacts of development options.
- A Development Capacity Study will assess the capacity of the relevant land parcels within NEC to accommodate development (including employment activities, residential and other uses) including the quantum of floorspace and assumed typologies.
- Employment Land Review to inform the demand and supply of employment land.
- Further ecology surveys, particularly of the Science Park.
- Community Audit, a detailed assessment of existing facilities and support to inform service delivery and infrastructure provision.
- A new Retail Needs Assessment
- Further Assessments of the impacts of constraints, including noise, air quality and contamination.
- Viability Assessment.
- NEC Infrastructure Delivery Plan assessment of the effectiveness and cost/benefit of potential mitigation measures for implementation within NEC.
- Policy approaches and options have been assessed at this stage rather than draft policies which would be clearer with regards to intent and therefore, potential impacts might be easier to predict. The findings of the SA, along with consultation responses on the Issues and Options document, will be used to develop policies at the Draft Plan stage.

3.6 Habitats Regulations Assessment

Habitats Regulations Assessment (HRA) is required under the EU Habitats Regulations (92/43/EEC) and the Conservation of Habitats and Species Regulations 2010 and is an assessment of the potential effects of a proposed plan in combination with other plans and projects on one or more European sites and Ramsar Sites. The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures.

The first stage of HRA is screening which identifies the likely impacts upon European sites and Ramsar sites, either alone or in combination with other projects or plans and considers whether these impacts are likely to be significant. If the screening stage concludes that there are likely to be no significant impacts on European sites then there is no need to progress to the next stage of Appropriate Assessment (AA). An initial screening exercise is being undertaken of the Issues and Options 2019 consultation document in order to identify, at this early stage, the likelihood of the NEC resulting in Likely Significant Effects (LSEs) on European sites and whether any of the options being considered present greater risks of LSEs occurring compared with the others. The methodology used for the HRA screening was used to assess the Local Plans and has previously been agreed with Natural England.