

APPENDIX E2

Policy Appraisal

Spatial Framework

Options

- A. Preferred Option – Draft Spatial Framework
- B. Alternative option – 6.8ha additional green space provision within NEC (therefore excluding Chesterton Fen)
- C. Alternative option – Industrial areas and relocated aggregates railhead adjacent to the A14
- D. Alternative option – Densification of industrial uses in current locations (Cowley and Nuffield road)
- E. Alternative option – Residential development (c. 1000 units) within Cambridge Science Park clustered around the proposed Local Centre
- F. Alternative option - Concept plan from 2019 Issues and Options document

The Councils have confirmed that options B to E take the Draft Spatial Framework as the starting point and are variations on that.

Table .1 Spatial Framework

SA objective	A	B	C	D	E	F ¹
1. Minimise the irreversible loss of undeveloped land, protect soils and economic mineral reserves	++	++	++	++	++	++
2. Improve air quality and minimise or mitigate against sources of environmental pollution	--/+	--/+	++/--	++/--	--/+	--/+
3. Protect and where possible enhance the quality of the water environment	+	+	+	+	+	+
4. Avoid adverse effects on designated sites and protected species	-?	-?	--?	-?	-?	-?
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	+	++?	+	+	+	+
6. Maintain and enhance the diversity and local distinctiveness of landscape and townscape character	++	++	++	++	++	++
7. Minimise impacts on climate change (including greenhouse gas emissions)	+/-	+/-	+/-	+/-	+/-	+/-
8. Reduce vulnerability to future climate change effects	+	+	+	+	+	+
9. Maintain and enhance human health and wellbeing and reduce inequalities	++	++	++	++	++	++
10. Improve the quantity and quality of publicly accessible open space	++	++	++	++	++	+
11. Ensure everyone has access to decent, appropriate and affordable housing	++	++?	++	++	++	++

¹ Note that some of these assessment results have changed since the Interim SA Report (February 2019), in order to ensure that all options are assessed on a consistent basis

SA objective	A	B	C	D	E	F ¹
12. Redress inequalities related to age, disability, gender, race, faith, location and income	+	+	+	+	+	+
13. Improve the quality, range and accessibility of services and facilities (e.g. health, transport, education, training, leisure opportunities)	++	++	++	++	++	+
14. Improve the efficiency, competitiveness, vitality and adaptability of the local economy	++?	++/-?	++?	++?	++?	++?
15. Support appropriate investment in people, places, communities and other infrastructure	++	++	++	++	++	++?
16. Reduce the need to travel and promote more sustainable travel choices	++/-	++/-	++/-	++/-	++/-	++/-

A. Draft Spatial Framework

Significant positive effects are expected for SA objective 1 (land, soils and mineral resources), as the Draft Spatial Framework aims to redevelop NEC to create a new community on largely previously developed land.

Mixed minor positive and significant negative effects are identified for SA objective 2 (air quality and pollution), as the Draft Spatial Framework encourages sustainable modes of travel, but also has potential to generate substantial amounts of traffic, including through the AQMA on the A14 Corridor. Mixed minor positive and minor negative effects have been identified for SA objective 7 (greenhouse gas emissions) to reflect the likely traffic to be generated but the emphasis on sustainable modes. A mixed significant positive and minor negative effects have been identified for SA objective 16 (sustainable travel).

Significant positive effects are identified against SA objectives 6 (landscape and townscape) and 9 (health and wellbeing), as the Draft Spatial Framework seeks to regenerate and improve this gateway to Cambridge and proposes to deliver a mix of uses where people working in the area have more opportunities to live nearby, and those living and working in the area have access to the right mix of services and facilities. The Framework also includes green infrastructure routes within the site and links to the wider countryside, as well as provision of new public green space, off-site at Chesterton Fen. Provision of new employment opportunities should help to address some issues related to deprivation in the area.

Significant positive effects are expected for SA objective 10 (open space), as the Draft Spatial Framework includes provision of a substantial area of new public green space at Chesterton Fen, retains and enhances the GI network within the site and includes a new link across the A14 to Milton Country Park.

Significant positive effects are expected for SA objectives 11 (housing) and 14 (economy), as the Draft Spatial Framework identifies a large area of land for housing development, which is expected to include affordable housing, and a substantial amount of employment development, which is expected to provide for a range of jobs. The effects for SA objective 14 are uncertain, as it is unclear whether there will be a net loss of industrial floorspace.

Significant positive effects are expected for SA objectives 13 (services and facilities) and 15 (infrastructure), as the Draft Spatial Framework includes provision for a new district centre and two new local centres, as well as two new schools and a 'civic hub / key social infrastructure cluster'.

A minor negative effect with uncertainty is recorded against SA objective 4 (protected habitats and species), as it is not clear whether the Milton Road Hedgerows City Wildlife Site will be conserved. In addition, the Bramblefields Local Nature Reserve is adjacent to the AAP area and could be affected by change of use in the surrounding area, although this is uncertain until more detailed proposals are put forward.

Minor positive effects are expected against the majority of remaining SA objectives, as the Draft Spatial Framework encourages sustainable modes of travel and improved biodiversity links through an enhanced green infrastructure network, and includes enhancements to the First Drain. The Concept Plan also provides for a mix of development, including new housing development, a new mixed use District centre and two mixed use local centres providing employment opportunities, which will help to provide opportunities for local people and support the local economy.

B. 6.8ha additional green space provision within NEC

Significant positive effects are expected for SA objective 1 (land, soils and mineral resources), as this option aims to redevelop NEC to create a new community on largely previously developed land.

Mixed minor positive and significant negative effects are identified for SA objective 2 (air quality and pollution), as this option encourages sustainable modes of travel, but also has potential to generate substantial amounts of traffic, including through the AQMA on the A14 Corridor. Mixed minor positive and minor negative effects have been identified for SA objective 7 (greenhouse gas emissions) to reflect the likely traffic to be generated but the emphasis on sustainable modes. A mixed significant positive and minor negative effects have been identified for SA objective 16 (sustainable travel).

Significant positive effects are expected for SA objective 5 (biodiversity), as provision of green space within the AAP area itself will provide greater opportunity for habitat creation and for people to access nature and greenspace. This option provides more scope to enhance the Biodiversity Opportunity Areas (BOAs) identified within the AAP area, although locating this greenspace at Chesterton Fen could also contribute towards the BOAs in that area. However, in being more within the urban area, these habitats may be subject to more physical, light and noise disturbance than if the green space was located at Chesterton Fen. More people are likely to benefit from this green space as it will be on the doorstep of their home or workplace and they are more likely to travel through it on a daily basis.

All options are expected to have significant positive effects on SA objectives 6 (landscape and townscape) and 9 (health and wellbeing), as the Draft Spatial Framework seeks to regenerate and improve this gateway to Cambridge and proposes to deliver a mix of uses where people working in the area have more opportunities to live nearby, and those living and working in the area have access to the right mix of services and facilities. The Framework also includes green infrastructure routes within the site and links to the wider countryside, as well as provision of new public green space, off-site at Chesterton Fen. Provision of new employment opportunities should help to address some issues related to deprivation in the area. This option has potential to provide further benefits for these objectives as provision of green space within the AAP area itself may provide a more attractive townscape and will provide greater opportunity for people to access nature and greenspace.

Significant positive effects are expected for SA objective 10 (open space), as the Draft Spatial Framework includes provision of a substantial area of new public green space at Chesterton Fen, retains and enhances the GI network within the site and includes a new link across the A14 to Milton Country Park.

Significant positive effects are expected for SA objective 11 (housing), as this option identifies a large area of land for housing development, which is expected to include affordable housing. However, in providing a greater level of greenspace within the AAP area it is possible that this option will lead to a lesser amount of housing provision, therefore the effect is uncertain.

Significant positive effects are expected for SA objectives 13 (services and facilities) and 15 (infrastructure), as the Draft Spatial Framework includes provision for a new district centre and two new local centres, as well as two new schools and a 'civic hub / key social infrastructure cluster'.

Whilst all options but Option F are expected to have significant positive effects on SA objectives 10 (open space) and 13 (services and facilities), this option may bring further benefits, for these objectives as provision of green space within the AAP area itself will provide greater opportunity for people to access nature and greenspace.

Mixed significant positive and minor uncertain effects are identified for SA objective 14 (economy), as this option provides for a substantial amount of employment development, which is expected to provide for a range of jobs, but provision of more greenspace onsite may lead to a loss in existing employment floorspace. The effects for SA objective 14 are uncertain, as it is unclear whether there will be a net loss of employment floorspace.

A minor negative effect with uncertainty is recorded against SA objective 4 (protected habitats and species), as it is not clear whether the Milton Road Hedgerows City Wildlife Site will be conserved. In addition, the Bramblefields Local Nature Reserve is adjacent to the AAP area and could be affected by change of use in the surrounding area, although this is uncertain until more detailed proposals are put forward.

Minor positive effects are expected against the majority of remaining SA objectives, as the Draft Spatial Framework encourages sustainable modes of travel and improved biodiversity links through an enhanced green infrastructure network, and includes enhancements to the First Drain. The Concept Plan also provides for a mix of development, including new housing development, a new mixed use District centre and two mixed use local centres providing employment opportunities, which will help to provide opportunities for local people and support the local economy.

C. Industrial areas and relocated aggregates railhead adjacent to the A14

Significant positive effects are expected for SA objective 1 (land, soils and mineral resources), as this option aims to redevelop NEC to create a new community on largely previously developed land.

Mixed significant positive and significant negative effects are identified for SA objective 2 (air quality and pollution), as this option encourages sustainable modes of travel, but also has potential to generate substantial amounts of traffic, including through the AQMA on the A14 Corridor. This option may bring further benefits for SA objective 2 compared to other options, as locating industrial uses and the aggregates railhead adjacent to the A14 may help to concentrate noisy uses in one part of the site, and the effects of this noise may be lessened by the fact the A14 is already a source of noise. A mixed minor positive and minor negative effects have been identified for SA objective 7 (greenhouse gas emissions) to reflect the likely traffic to be generated but the emphasis on sustainable modes. A mixed significant positive and minor negative effects have been identified for SA objective 16 (sustainable travel).

Significant positive effects are identified against SA objectives 6 (landscape and townscape) and 9 (health and wellbeing), as this option seeks to regenerate and improve this gateway to Cambridge and proposes to deliver a mix of uses where people working in the area have more opportunities to live nearby, and those living and working in the area have access to the right mix of services and facilities. The Framework also includes green infrastructure routes within the site and links to the wider countryside, as well as provision of new public green space, off-site at Chesterton Fen. Provision of new employment opportunities should help to address some issues related to deprivation in the area.

Significant positive effects are expected for SA objective 10 (open space), as the Draft Spatial Framework includes provision of a substantial area of new public green space at Chesterton Fen, retains and enhances the GI network within the site and includes a new link across the A14 to Milton Country Park.

Significant positive effects are expected for SA objective 11 (housing) and 14 (economy), as this option identifies a large area of land for housing development, which is expected to include affordable housing and a substantial amount of employment development, which is expected to provide for a range of jobs. The effects for SA objective 14 are uncertain, as it is unclear whether there will be a net loss of industrial floorspace.

Significant positive effects are expected for SA objectives 13 (services and facilities) and 15 (infrastructure), as the Draft Spatial Framework includes provision for a new district centre and two new local centres, as well as two new schools and a 'civic hub / key social infrastructure cluster'.

A significant negative effect with uncertainty is recorded against SA objective 4 (protected habitats and species), as this option is expected to involve relocating industrial land uses and the aggregates railhead either adjacent to the Milton Road Hedgerows City Wildlife Site, therefore increasing disturbance at this site, or it could lead to loss of this feature. In addition, the Bramblefields Local Nature Reserve is adjacent to the AAP area and could be affected by change of use in the surrounding area, although this is uncertain until more detailed proposals are put forward.

Minor positive effects are expected against the majority of remaining SA objectives, as the Draft Spatial Framework encourages sustainable modes of travel and improved biodiversity links through an enhanced green infrastructure network, and includes enhancements to the First Drain. The Concept Plan also provides for a mix of development, including new housing development, a new mixed use District centre and two mixed use local centres providing employment opportunities, which will help to provide opportunities for local people and support the local economy.

D. Densification of industrial uses in current locations

Significant positive effects are expected for SA objective 1 (land, soils and mineral resources), as this option aims to redevelop NEC to create a new community on largely previously developed land.

Mixed significant positive and significant negative effects are identified for SA objective 2 (air quality and pollution), as this option encourages sustainable modes of travel, but also has potential to generate substantial amounts of traffic, including through the AQMA on the A14 Corridor. This option may bring further benefits for SA objective 2 compared to other options, it will concentrate industrial uses, which are more likely to be noisy, in one part of the site. A mixed minor positive and minor negative effects have been identified for SA objective 7 (greenhouse gas emissions) to reflect the likely traffic to be generated but the emphasis on sustainable modes. A mixed significant positive and minor negative effects have been identified for SA objective 16 (sustainable travel).

Significant positive effects are identified against SA objectives 6 (landscape and townscape) and 9 (health and wellbeing), as this option seeks to regenerate and improve this gateway to Cambridge and proposes to deliver a mix of uses where people working in the area have more opportunities to live nearby, and those living and working in the area have access to the right mix of services and facilities. The Framework also includes green infrastructure routes within the site and links to the wider

countryside, as well as provision of new public green space, off-site at Chesterton Fen. Provision of new employment opportunities should help to address some issues related to deprivation in the area.

Significant positive effects are expected for SA objective 10 (open space), as the Draft Spatial Framework includes provision of a substantial area of new public green space at Chesterton Fen, retains and enhances the GI network within the site and includes a new link across the A14 to Milton Country Park.

Significant positive effects are expected for SA objective 11 (housing) and 14 (economy), as this option identifies a large area of land for housing development, which is expected to include affordable housing and a substantial amount of employment development, which is expected to provide for a range of jobs. The effects for SA objective 14 are uncertain, as it is unclear whether there will be a net loss of industrial floorspace.

Significant positive effects are expected for SA objectives 13 (services and facilities) and 15 (infrastructure), as the Draft Spatial Framework includes provision for a new district centre and two new local centres, as well as two new schools and a 'civic hub / key social infrastructure cluster'.

A minor negative effect with uncertainty is recorded against SA objective 4 (protected habitats and species), as it is not clear whether the Milton Road Hedgerows City Wildlife Site will be conserved. In addition, the Bramblefields Local Nature Reserve is adjacent to the AAP area and could be affected by change of use in the surrounding area, although this is uncertain until more detailed proposals are put forward.

Minor positive effects are expected against the majority of remaining SA objectives, as the Draft Spatial Framework encourages sustainable modes of travel and improved biodiversity links through an enhanced green infrastructure network, and includes enhancements to the First Drain. The Concept Plan also provides for a mix of development, including new housing development, a new mixed use District centre and two mixed use local centres providing employment opportunities, which will help to provide opportunities for local people and support the local economy.

E. Residential development within Cambridge Science Park clustered around the proposed Local Centre

Significant positive effects are expected for SA objective 1 (land, soils and mineral resources), as this option aims to redevelop NEC to create a new community on largely previously developed land.

Mixed minor positive and significant negative effects are identified for SA objective 2 (air quality and pollution), as this option encourages sustainable modes of travel, but also has potential to generate substantial amounts of traffic, including through the AQMA on the A14 Corridor. A mixed minor positive and minor negative effects have been identified for SA objective 7 (greenhouse gas emissions) to reflect the likely traffic to be generated but the emphasis on sustainable modes. A mixed significant positive and minor negative effects have been identified for SA objective 16 (sustainable travel).

Significant positive effects are identified against SA objectives 6 (landscape and townscape) and 9 (health and wellbeing), as the Draft Spatial Framework seeks to regenerate and improve this gateway to Cambridge and proposes to deliver a mix of uses where people working in the area have more opportunities to live nearby, and those living and working in the area have access to the right mix of services and facilities. The Framework also includes green infrastructure routes within the site and links to the wider countryside, as well as provision of new public green space, off-site at Chesterton Fen. Provision of new employment opportunities should help to address some issues related to deprivation in the area.

Significant positive effects are expected for SA objective 10 (open space), as the Draft Spatial Framework includes provision of a substantial area of new public green space at Chesterton Fen, retains and enhances the GI network within the site and includes a new link across the A14 to Milton Country Park.

Significant positive effects are expected for SA objective 11 (housing) and 14 (economy), as this option identifies a large area of land for housing development, which is expected to include affordable housing and a substantial amount of employment development, which is expected to provide for a range of jobs. The effects for SA objective 14 are uncertain, as it is unclear whether there will be a net loss of industrial floorspace.

Significant positive effects are expected for SA objectives 13 (services and facilities) and 15 (infrastructure), as the Draft Spatial Framework includes provision for a new district centre and two new local centres, as well as two new schools and a 'civic hub / key social infrastructure cluster'. Whilst all options are expected to have significant positive effects on SA objective 13 (services and facilities), this option may bring further benefits as it provides the opportunity for people to live closer to where they work, whilst still having access to local facilities.

A minor negative effect with uncertainty is recorded against SA objective 4 (protected habitats and species), as it is not clear whether the Milton Road Hedgerows City Wildlife Site will be conserved. In addition, the Bramblefields Local Nature Reserve is

adjacent to the AAP area and could be affected by change of use in the surrounding area, although this is uncertain until more detailed proposals are put forward.

Minor positive effects are expected against the majority of remaining SA objectives, as the Draft Spatial Framework encourages sustainable modes of travel and improved biodiversity links through an enhanced green infrastructure network, and includes enhancements to the First Drain. The Concept Plan also provides for a mix of development, including new housing development, a new mixed use District centre and two mixed use local centres providing employment opportunities, which will help to provide opportunities for local people and support the local economy.

Whilst all options are expected to have minor positive effects on SA objectives 7 (greenhouse gas emissions) and 16 (sustainable travel), this option may bring further benefits as it provides the opportunity for people to live closer to where they work, whilst still having access to local facilities.

F. Concept plan from 2019 Issues and Options document

Significant positive effects are expected for SA objective 1 (land, soils and mineral resources), as the concept plan aims to redevelop NEC to create a new community on largely previously developed land.

Mixed minor positive and significant negative effects are identified for SA objective 2 (air quality and pollution), as the concept plan encourages sustainable modes of travel, but also has potential to generate substantial amounts of traffic, including through the AQMA on the A14 Corridor. A mixed minor positive and minor negative effects have been identified for SA objective 7 (greenhouse gas emissions) to reflect the likely traffic to be generated but the emphasis on sustainable modes. A mixed significant positive and minor negative effects have been identified for SA objective 16 (sustainable travel).

Significant positive effects are identified against SA objectives 6 (landscape and townscape) and 9 (health and wellbeing), as the indicative concept plan seeks to improve this gateway to Cambridge and proposes to deliver a mix of uses where people working in the area have more opportunities to live nearby, and those living and working in the area have access to the right mix of services and facilities. The Plan also proposes green infrastructure routes within the site and to the wider countryside, and proposes to improve the First Public drain contributing to improved townscape character for future users of the site. Provision of new employment opportunities should help to address some issues related to deprivation in the area.

A minor negative effect with uncertainty is recorded against SA objective 4 (protected habitats and species), as it is not clear whether the Milton Road Hedgerows City Wildlife Site will be conserved. In addition, the Bramblefields Local Nature Reserve is adjacent to the AAP area and could be affected by change of use in the surrounding area, although this is uncertain until more detailed proposals are put forward.

Significant positive effects are expected for SA objective 11 (housing) and 14 (economy), as the concept plan identifies a large area of land for housing development, which is expected to include affordable housing and a substantial amount of employment development, which is expected to provide for a range of jobs. The effects for SA objective 14 are uncertain, as it is unclear whether there will be a net loss of industrial floorspace.

Minor positive effects are expected against the majority of remaining SA objectives, as it encourages sustainable modes of travel and improved biodiversity links through the green infrastructure network, and proposes a sustainable water management network. The Concept Plan also provides for a mix of development, including new housing development, a new mixed use District centre and two mixed use local centres providing employment opportunities, which will help to provide opportunities for local people, provide access to a range of services and support the local economy. With regards to SA objectives 5 (biodiversity), 9 (health and wellbeing) and it is noted that the Indicative Concept Plan does not include a new link across the A14 to Milton Country Park, whereas the Draft Spatial Framework does.

Recommendations

Many effects will depend on the exact design of development, which will be in accordance with other AAP policies. Design-based recommendations are therefore included for the relevant policies and are not repeated here.

Archaeological surveys should also be carried out prior to redevelopment of any part of the site.

It is recommended that the effects of proposed development on the AQMA along the A14 Corridor should be subject to assessment and mitigated as appropriate. In addition, it is recommended soft landscaping is used along the A14 and alongside the railway (and any other significant sources of noise) to buffer the site from noise and air pollution. A construction environmental management plan should also be produced to avoid, minimise and mitigate environmental pollution in the construction phase. Furthermore, developers should be encouraged to register with The Considerate Constructors Scheme which includes guidelines for considering the impact on neighbours, and for protecting and enhancing the environment.

Opportunities to improve habitat corridors through BOAs should also be realised as far as possible. Furthermore the recommendations set out in the Biodiversity Assessment² should be included in the AAP.

New and enhanced active travel routes (walking and cycling) should be fully segregated from each other and vehicular traffic to ensure a safe environment for all. Ideally, active travel links should be prioritised over roads and should be suitable for all users, including wheelchair users. Proposed interventions set out in the Transport Study³ should also be included.

In terms of equalities, affordable housing provision should include a mix of type and tenure to meet local demand. Furthermore, a large proportion of employment opportunities should be available for local people

² MKA Ecology Ltd (2019) North East Cambridge Area Action Plan Biodiversity Assessment
³ Mott MacDonald (2019) North East Cambridge Area Action Plan Transport Evidence Base