
The Cambridge South East Transport Order

Transport And Works Act 1992

Transport And Works (Applications And Objections Procedure) (England And Wales) Rules 2006

Appendix C - Consideration of Green Belt Issues

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Cambridge South East Transport Phase 2

Consideration of Green Belt Issues

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1.0 Introduction

1.1. Appointment and Scope

- 1.1.1. This study was commissioned by Cambridgeshire County Council on behalf of the Greater Cambridge Partnership (GCP) to accompany an application for an Order under the Transport and Works Act 1992 (TWA Order) in relation to a section of the proposed guided busway and Travel Hub between Cambridge and Haverhill known as Cambridge South East Transport (CSET), between the Cambridge Biomedical Campus (CBC) and the A11. The purpose of the report is to consider the Green Belt issues associated with the CSET project.
- 1.1.2. Previous reports were prepared in 2020, 2021 and 2022 to inform the selection of options for the alignment of the route and location of the proposed Travel Hub. This report follows the same format as those previous reports.
- 1.1.3. The assessment has been carried out by Charles Crawford (MA (Cantab), Post Graduate Diploma Landscape Architecture) and Ruth Knight (BA (Hons) Landscape Design and Town Planning, Post Graduate Diploma Landscape Architecture, MA Planning Policy and Practice), who are both Chartered Members of the Landscape Institute and have extensive experience of undertaking Green Belt assessments. They have led work by LDA Design in relation to the Cambridge Green Belt since 2015. This work comprises the Cambridge Inner Green Belt Boundary Study¹ for Cambridge City Council and South Cambridgeshire District Council, which was undertaken to support the examination of their respective Local Plans, assessments of the Cambourne to Cambridge guided busway scheme, undertaken for Cambridgeshire County Council on behalf of the Greater Cambridge Partnership, and assessments of CSET.
- 1.1.4. This report is not an assessment under the Environmental Impact Assessment Regulations. It forms an independent assessment of the potential impacts of the project on the Green Belt. The findings of this report feed into the Planning Statement and Green Belt Assessment prepared by Strutt & Parker (document reference CSET-15-00-00), which sets out wider considerations regarding the overall planning balance of the scheme, including matters related to Green Belt and whether the proposals are not inappropriate development or whether very special circumstances are considered to be required.

1.2. Proposed Development

- 1.2.1. The Cambridge South East Transport Phase 2 project (the Project) would provide better public transport and sustainable travel options for those who travel in the A1307 and A1301 area, improving journey times, reliability and linking communities and employment sites in the area south east of Cambridge and beyond. The Project consists of:
 - a two-way, mostly segregated guided busway approximately 8.5 kilometres in length commencing at CBC at the southern end of Francis Crick Avenue in Cambridge and terminating at a new Travel Hub facility near to the A1307/A11/A505 road junction southeast of the village of Babraham;

¹ <https://www.cambridge.gov.uk/public/ldf/coredocs/rd-mc-030-part1.pdf>

- intermediate bus stops at Great Shelford, Stapleford and Sawston with upgraded walking and cycling routes to the stops and an emergency and maintenance access track running alongside the entire route designed as a multi-user facility to be shared by pedestrians, cyclists and, for part of the route, horse riders;
- a new Travel Hub building and Park and Ride site between the A11 and Babraham with car access from the A1307 and an improved active travel route connecting the Travel Hub with Babraham High Street;
- new bridges over the River Granta and Hobson's Brook to provide for the guided busway and adjoining emergency and maintenance track;
- access roads, temporary compounds, stopping up, diversion and creation of public rights of way, highway crossings, drainage works, embankments, landscaping and attenuation and infiltration ponds.

1.2.2. Figure 1 shows the proposed route assessed in this report, as well as the proposed Travel Hub location (which would be similar to existing Park & Ride sites around Cambridge). This information is as provided for the application for an Order under the Transport and Works Act 1992. In brief, the route and Travel Hub are as follows, with further detail provided in Sections 8-12 of this report:

- Route between CBC and Great Shelford – the route would leave CBC at the base of the embankment of the existing Addenbrooke's Road bridge. It would run west of White Hill, along the side of the existing London to Cambridge railway line, before crossing Granham's Road close to the access to White Hill Farm. The route would run to the north of an existing gap in the hedgerow between Great Shelford and Clarke's Hill, then along the edge of a field to cross Hinton Way east of Great Shelford.
 - A culvert structure (Structure 1) (document reference CSET-11-D03-00, drawing no. WHL_AL_SCHME-DR-CB-000006) would be required to allow the route and a realigned existing track to cross a ditch located on the boundary of the Green Belt. The culvert would be approximately 45m long. The top of the culvert would be a minimum of 1m above the normal water level, existing ground levels, with the ground level further built up on top of that by varying amounts (a minimum of 0.6m) at the locations of the guided busway, existing track and a multi-use path. Head walls at either end of the culvert would be approximately 2m above existing ground levels and include stepped access with a 1.1m or 1.4m high post and rail fence along the edge, depending on the location.
 - A bridge structure (Structure 3) (document reference CSET-11-D03-00, drawing no. WHL_AL_SCHME-DR-CB-000006) would also be required to allow a multi-use path to cross the same ditch, to the east of the proposed route and also on the Green Belt boundary. Full details of this bridge are not currently available, but a span of approximately 4.5m would be required and the deck would need to be close to existing ground levels to allow tie into the realigned active travel path.
 - A further bridge structure (Structure 4) (document reference CSET-11-D03-00, drawing nos. WHL_AL_SCHME-DR-CB-000001 and 000002) would be required

to cross Hobson's Brook, a spring that runs between Nine Wells and Hobson's Conduit. The proposals indicate that it would have a deck width of approximately 13.9m, a span of approximately 15m and have a clearance of a minimum of 2.4m above the existing ground level, with earth embankments approaching the bridge and a parapet height of approximately 1.8m above the assumed deck height of approximately 2.7m.

- Lighting would be required at the Granham's Road crossing.
- Route between Great Shelford and Sawston – South of Hinton Way, the route would rise slightly up the slope of Magog Down, before curving round the north east of Great Shelford and Stapleford (including the consented retirement village on the eastern edge of Stapleford that is under construction) to cross Haverhill Road. From Haverhill Road the route would descend down to the River Granta. From the River Granta, the proposed route would cross open fields to run to the east of the disused railway line and the eastern edge of Sawston, crossing Babraham Road on the eastern edge of Sawston and then continuing to follow an alignment parallel to the disused railway line.
 - A stop is proposed on the southern side of Hinton Way, south west of the route alignment. Lighting would be required at the stop and the road crossing.
 - A second stop is proposed south of Haverhill Road and west of the route, to serve Stapleford. Lighting would be required at the stop and the road crossing.
 - The crossing of the River Granta would require a bridge structure (Structure 6) (document reference CSET-11-D03-00, drawing nos. WHL_AL_SCHME-DR-CB-000003 to 000005) . The proposals indicate that the bridge structure would have a deck width of approximately 14.4m, with a maximum span of 118m to avoid embankments within Flood Zone 3, and a deck height of approximately 5m above the existing ground level. The earth embankments approaching the bridge would potentially extend for a minimum of 380m to the south and 300m to the north. Culverts would be constructed within the earth embankments north and south of the river to cross existing ditches.
 - A stop is proposed on the southern side of Babraham Road, west of the route alignment. Lighting would be required at the stop and the road crossing.
- Route between Sawston and the Travel Hub - the alignment would curve away from the disused railway line to cross High Street approximately 165m north of the disused railway line. It would then run to the north of the high point of a minor ridgeline, crossing the River Granta before curving round to enter the proposed Travel Hub from the west, close to the existing footpath and cycleway link.
 - Lighting would be required at the High Street crossing.
 - The crossing of the River Granta would require a bridge structure (Structure 8) (document reference CSET-11-D03-00, drawing no. WHL_AL_SCHME-DR-CB-000009 and 000010). The proposals indicate that the bridge structure would have a deck width of approximately 14.4m, with a maximum span of 130m and a deck height of a minimum of 2.3m above the existing ground level to allow farm access

underneath the bridge. The earth embankments approaching the bridge would extend approximately 150m to the north of the bridge and approximately 175m to the south.

- Travel Hub Site - this would be located on slightly lower ground adjacent to the western edge of the A11, to the south east of Babraham. It would accommodate 1,250 parking spaces and other features such as coach bays, cycle and motorcycle parking, a central building of approximately 160m² footprint and approximately 6m high, with circulation routes, hard and soft landscaping, SuDS features and lighting. 150 of the parking bays would be covered by solar panels approximately 2.5m high. The proposals indicate that vehicular access to the Travel Hub would be via a new roundabout on the A1307, at the point where existing vegetation around the A3017 and A11 junction stops. The access road would run south for approximately 180m then turn eastwards into the Travel Hub.
- An upgraded foot/multi-user bridge and associated ramps over the A11 has been removed from the CSET proposals and provided as a separate project. Assessment of the effects of these elements of the scheme on the Green Belt are not included within this assessment.
- A potential link from the Travel Hub to Granta Park will also be delivered as a separate project and is not considered within this assessment.

1.3. Structure of the Report

- 1.3.1. Section 2 summarises the relevant policy background applicable to Green Belt openness and purposes in the Cambridge context and reviews relevant previous policy and studies that have identified specific elements or qualities of Cambridge and its surrounding landscape that are relevant to Green Belt purposes.
- 1.3.2. Section 3 outlines the overarching considerations that apply to the proposed guided busway a through the Cambridge Green Belt, as well as those relating to the Travel Hub.
- 1.3.3. Section 4 describes the methodology used in carrying out this study.
- 1.3.4. Section 5 presents the results of baseline studies and analysis, which enable Cambridge and its surroundings to be understood in the context of Green Belt openness and purposes.
- 1.3.5. Section 6 draws out qualities of the city and its surrounding landscape that contribute to the performance of Green Belt purposes.
- 1.3.6. Section 7 introduces the sector assessments for the different sectors.
- 1.3.7. Sections 8-12 contain detailed assessments of the proposed route and Travel Hub within each of the Green Belt sectors, in terms of whether the route or Travel Hub facilities preserve the openness of the Green Belt and/or would conflict with Green Belt purposes. The test in paragraph 154(h)(iii) of the National Planning Policy Framework, December 2024 (NPPF) has then been applied to identify any potential harm to Green Belt that would arise from the different options, before a separate judgement has been made on the degree of any potential harm to the Green Belt.
- 1.3.8. Section 13 provides conclusions in relation to the proposed route and Travel Hub.

2.0 Policy and Previous Studies

2.1. Green Belt Policy Tests

- 2.1.1. Paragraph 154(h) of the NPPF states that certain forms of development are not 'inappropriate', provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land within Green Belt. These forms of development include 'local transport infrastructure which can demonstrate a requirement for a Green Belt location'. The Planning Statement and Green Belt Assessment prepared by Strutt & Parker (document reference CSET-15-00-00) demonstrates that a Green Belt location is required for the proposed development.
- 2.1.2. On the basis that the proposed guided busway and Travel Hub would comprise 'local transport infrastructure which can demonstrate a requirement for a Green Belt location', the test under paragraph 154(h) is whether the scheme would preserve the openness of the Green Belt and not conflict with the purposes of including land in Green Belt.
- 2.1.3. Paragraph 153 states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. It states that, when considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.
- 2.1.4. This report therefore firstly considers whether the proposed route and Travel Hub would preserve the openness of the Green Belt and avoid conflict with Green Belt purposes. Where the report identifies that openness is not preserved or there is conflict with any Green Belt purposes, the report identifies the degree of potential harm to the Green Belt. The Planning Statement sets out wider considerations regarding the overall planning balance of the scheme, including matters related to Green Belt and whether the proposals are not inappropriate development or whether very special circumstances apply.

2.2. Openness of the Green Belt

- 2.2.1. Paragraph 142 of the NPPF states that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open. The essential characteristics of Green Belts are their openness and their permanence. Whilst the NPPF does not contain a definition of openness, it is usually understood to mean the absence of built development.
- 2.2.2. In addition, Planning Practice Guidance on Green Belt identifies matters that may need to be taken into account when assessing the impact of proposals on Green Belt, including:
 - openness is capable of having both spatial and visual aspects – in other words, the visual impact of the proposal may be relevant, as could its volume;
 - the duration of the development, and its remediability – taking into account any provisions to return land to its original state or to an equivalent (or improved) state of openness; and
 - the degree of activity likely to be generated, such as traffic generation.

- 2.2.3. Both the proposed guided busway and the Travel Hub facility are intended to be permanent and are consequently regarded as irremediable. As the proposed guided busway will only be used by buses and occasional maintenance or emergency vehicles along the adjoining track, the degree of activity will be low; this is taken into account where appropriate in the assessments in sections 8-12 of this report. However, the Travel Hub facility is likely to generate a much higher degree of activity, which is also taken into account where appropriate in the assessments in sections 8-12 of this report.
- 2.2.4. Since the Planning Practice Guidance on Green Belt was published there has been a Supreme Court ruling in relation to the relationship between visual impact and openness of the Green Belt. The judgement in *R (on the application of Samuel Smith Old Brewery (Tadcaster) and others) (Respondents) v North Yorkshire County Council (Appellant)*, February 2020, indicates that the visual quality of a landscape is not in itself an essential part of the openness for which the Green Belt is protected. The reference to openness in paragraph 154(h) of the NPPF *"does not imply freedom from any form of development"* and *"is not necessarily a statement about the visual qualities of the land"*. However, the ruling does indicate that visual impact can still be relevant to the question of whether openness will be preserved. This report continues to consider the visual aspects of the proposed guided busway and Travel Hub which are, in the author's professional judgement, relevant considerations of the proposals' potential effects on the openness of the Green Belt or potential to conflict with Green Belt purposes.
- 2.3. Green Belt Purposes**
- 2.3.1. At the national level, paragraph 143 of the NPPF sets out five purposes for Green Belt. The five purposes are as follows:
1. To check the unrestricted sprawl of large built-up areas
 2. To prevent neighbouring towns merging into one another
 3. To assist in safeguarding the countryside from encroachment
 4. To preserve the setting and special character of historic towns
 5. To assist in urban regeneration, by encouraging the recycling of derelict and other urban land.
- 2.3.2. These purposes are referred to in this report as the **National Green Belt purposes**.
- 2.3.3. As described in section 3 of this report, the Project is part of a strategic approach to development around Cambridge, which seeks to locate development in sustainable locations supported by sustainable travel options. The Project is therefore neutral in terms of National Green Belt purpose 5. Consequently, purpose 5 is not considered further in this study.
- 2.3.4. At a local level, three purposes have been defined for the Cambridge Green Belt in local policy². They are as follows:

² Refer to Cambridge Local Plan 2018, Adopted October 2018. Cambridge Green Belt purposes identified at paragraph 2.52 and South Cambridgeshire Local Plan, Adopted September 2018. Cambridge Green Belt purposes identified at paragraph 2.30.

1. Preserve the unique character of Cambridge as a compact, dynamic city with a thriving historic centre
2. Maintain and enhance the quality of its setting
3. Prevent communities in the environs of Cambridge from merging into one another and with the city.

2.3.5. These are referred to as the **Cambridge Green Belt purposes** in this report and have been numbered for ease of reference, although they are unnumbered in the relevant policy documents.

2.3.6. The principal relationships between the Cambridge Green Belt purposes and the National Green Belt purposes are readily apparent from their wording. Cambridge Green Belt purpose 1 (character) and 2 (setting) derive from National Green Belt purpose 4. Cambridge Green Belt purpose 3 (merging) clearly relates to National Green Belt purpose 2 but, since the presence of necklace villages³ close to the outskirts of Cambridge is widely recognised as a key element of the city's character, it is also relevant to National Green Belt purpose 4. When the qualities that contribute to character and setting are considered in greater detail, other relationships between the Cambridge Green Belt purposes and the National Green Belt purposes become apparent. For example, various aspects of the character and setting of Cambridge also contribute to the performance of National Green Belt purposes 1, 2 and 3. These interrelationships are highlighted further in section 6 of this report, particularly within the table in section 6.1.

2.4. Previous Studies

2.4.1. The Cambridge Inner Green Belt Boundary Study⁴, November 2015, was undertaken by LDA Design for Cambridge City Council and South Cambridgeshire District Council. Section 2.3 of the Study sets out a series of policy documents and previous studies that have identified relevant qualities of Cambridge and its surrounding landscape that contribute to the performance of Green Belt purposes. This study does not repeat that information, but accepts the conclusion of that chapter of the 2015 study, as follows:

"Whilst there is significant variation in the number of Green Belt qualities mentioned in the various studies and policy documents, there is notable consistency among those mentioned, with a number of substantively the same qualities mentioned in several different documents. The up to date analysis undertaken in the course of the present study largely confirms the relevance of the previously identified qualities as criteria for the Green Belt assessment."

2.4.2. In addition, in 2017 LDA Design undertook an assessment of route options for Phase 1 of the Cambourne to Cambridge guided busway project on behalf of Greater Cambridge Partnership. This was followed in 2019 by a similar study for Phase 2 of the same transport route. These studies developed the methodology employed in this current study.

³ Necklace villages are villages that, due to their close proximity to Cambridge, play a particularly important role in the immediate setting of the city.

⁴ <https://www.cambridge.gov.uk/public/ldf/coredocs/rd-mc-030-part1.pdf>

- 2.4.3. To inform the emerging Greater Cambridge Local Plan, the Greater Cambridge Green Belt Assessment⁵ was prepared by LUC on behalf of South Cambridgeshire District Council and Cambridge City Council and was published in August 2021. This study retains the five national Green Belt purposes identified in the National Planning Policy Framework (NPPF) and the three Cambridge Green Belt purposes identified in the Cambridge Local Plan and South Cambridgeshire Local Plan. The assessment identifies a slightly different interpretation of the correlation between the Cambridge Green Belt purposes and the national Green Belt purposes from that outlined at paragraph 2.3.6 above, as follows:

Cambridge Purpose	NPPF Purpose
1. Preserve the unique character of Cambridge as a compact, dynamic city with a thriving historic centre.	1. To check the unrestricted sprawl of large built-up areas.
2. Maintain and enhance the quality of its setting.	3. To assist in the safeguarding of the countryside from encroachment. 4. To preserve the setting and special character of historic towns.
3. Prevent communities in the environs of Cambridge from merging into one another and with the city.	2. To prevent neighbouring towns merging into one another.

- 2.4.4. In addition, the Greater Cambridge Green Belt Assessment considers the special qualities/characteristics of the Cambridge Green Belt as identified in the South Cambridgeshire Local Plan, 2018 and the 2015 Cambridge Inner Green Belt Study. The 'Greater Cambridge Green Belt Assessment' distils the special qualities down to several features or aspects relevant to the quality of Cambridge's setting, as follows:

Qualities/characteristics of the Cambridge Green Belt from 2021 Greater Cambridge Green Belt Assessment	Special Qualities from 2015 Cambridge Inner Green Belt Study
1. Preserve the unique character of Cambridge as a compact, dynamic city with a thriving historic centre.	1. A large historic core relative to the size of the city as a whole. 2. A city focussed on the historic core. 4. A city of human scale easily crossed by foot and by bicycle. 9. A soft green edge to the city. 10. Good urban structure with well-designed edges to the city.
2. Maintain and enhance the quality of its setting.	3. Short and/or characteristic approaches to the historic core from edge of the city.

⁵ https://consultations.greatercambridgeplanning.org/sites/gcp/files/2021-08/GreenBeltStudy_GCLP_210831.pdf

	<p>5. Topography providing a framework to Cambridge.</p> <p>6. Long distance footpaths and bridleways providing access to the countryside.</p> <p>7. Key views of Cambridge from the surrounding landscape.</p> <p>8. Significant areas of distinctive and supportive townscape and landscape.</p> <p>11. Green corridors into the city.</p> <p>13. The scale, character, identity and rural setting of the necklace villages.</p> <p>14. Designated sites and areas enriching the setting of Cambridge.</p> <p>15. Elements and features contributing to the character and structure of the landscape.</p> <p>16. A city set in a landscape which retains a strongly rural character.</p>
3. Prevent communities in the environs of Cambridge from merging into one another and with the city.	12. The distribution, physical and visual separation of the necklace villages.

- 2.4.5. For consistency with the work undertaken to date in relation to the Project, and given that the new study has not yet been tested through a Local Plan Examination, this assessment of proposed alterations will utilise the correlation between the Cambridge Green Belt purposes and the national Green Belt purposes set out in paragraph 2.3.6 above.

3.0 Overarching Green Belt Considerations

3.1. Strategic Approach to Development around Cambridge

- 3.1.1. Cambridge City Council and South Cambridgeshire District Council, under the duty to cooperate and given the interdependencies between the two Councils through the location of key employment sites, patterns of travel to work and access to services and facilities, have jointly considered the approach to sustainable development in and around Cambridge. South Cambridgeshire District set out at paragraph 2.44 of their Adopted Local Plan (September 2018) that the challenges for sustainable development strategy include:

“balancing the sustainability merits of land on the edge of Cambridge in terms of accessibility to services and facilities and reducing emissions with the sustainability merits of land in the Green Belt on the edge of Cambridge in terms of protecting the special characteristics of Cambridge as a compact historic city”.

- 3.1.2. Paragraph 2.46 goes on to state:

“Cambridge City Council and South Cambridgeshire District Council jointly reached the view on the extent of change on the edge of Cambridge where only minor revisions to the inner Green Belt boundary are proposed in the Local Plans”.

- 3.1.3. The Adopted version of the Cambridge Local Plan (October 2018) indicates at paragraph 2.21 that sustainable transport capacity needs:

“to be provided in the sub-region between the key economic hubs in and around the city and where people live and access services. The strategy plans to further improve the sustainable transport network around the economic hubs and the hi tech clusters in and around the city, by making movement between them straightforward and convenient. The transport strategy has been prepared in parallel with the two new local plans and will set out the mitigation and infrastructure requirements necessary to promote sustainable travel as part of the development strategy of the two plans.”

- 3.1.4. Paragraph 2.25 indicates that the sustainable development strategy is:

“a considerable challenge for the Cambridge area. There is a need for new homes to support the jobs. The aim is to provide as many of those new homes as close to the new jobs as possible to minimise commuting and to minimise and mitigate harmful effects for the environment, climate change and quality of life. The need for jobs and homes has to be considered within the context of a tightly-drawn Green Belt, which aims to protect the unique character of Cambridge as a compact, dynamic city with a thriving historic centre, maintain and enhance the quality of the city’s setting, and prevent the city merging with the ring of necklace villages. The Green Belt and its purposes help underpin the quality of life and place in Cambridge, which are fundamental to economic success. Achieving an appropriate balance between these competing arms of sustainable development is a key objective of the development strategy for the new local plans”.

- 3.1.5. Paragraph 3.56 states the vision for the Southern Fringe Area of Major Change is:
“to meet a range of needs for the Cambridge area, including additional housing, secondary and primary schools, local community and retail uses, and improved access to the countryside.”
- 3.1.6. Paragraph 3.64 highlights that planning applications within this area should take opportunities:
“to enhance amenity and biodiversity in the associated Green Belt land and access to this and the open countryside beyond. Key features to be taken into account include Hobson’s Brook and other features important for biodiversity, existing trees, and the sensitive transition between the urban fringe and the open countryside.”
- 3.1.7. Paragraphs 9.12 focuses on the land for public transport and states that:
“Congestion is a problem in Cambridge, and it is vital for buses to be free from other traffic, where possible, in order for them to deliver on reliability and speed of journey. For this reason, it is important to safeguard land for new public transport infrastructure, such as bus lanes, interchange facilities and junction improvements.”
- 3.1.8. This provides the context for the consideration of a proposed improved public transport route from Cambridge to Haverhill, of which the proposed stretch of the guided busway from the Biomedical Campus to the A11/A505 and the proposed Travel Hub facility, would form part.

4.0 Methodology

4.1. Introduction

- 4.1.1. This study draws significantly from Cambridge Inner Green Belt Boundary Study (November 2015)⁶ (the 2015 study). The principal requirement of that study is to assess how land in the Inner Cambridge Green Belt performs against Green Belt purposes. Both National Green Belt purposes (with the exception of purpose 5) and Cambridge Green Belt purposes are considered, as identified in section 2.3 of this study.
- 4.1.2. This study is required to take the assessment process a stage further than the 2015 study and assess whether the route and Travel Hub site would preserve the openness of the Green Belt or conflict with the purposes of including land in Green Belt. In situations where openness is not preserved or there would be potential conflict with Green Belt purposes, the degree of Green Belt conflict that would result is then considered.
- 4.1.3. The methodology set out below mirrors the approach taken by LDA Design in assessing route options and potential park & ride sites for the Cambourne to Cambridge guided busway and Travel Hub in 2017 (Phase 1) and 2019 (Phase 2), as well as in previous studies of options for the route from the Biomedical Campus to the A11/A505. Site visits in relation to the Project were undertaken during February and March 2020 and in December 2024.

4.2. Methodology

- 4.2.1. The methodology for this study has four stages:
- Stage 1: Identification of sectors and sub areas within the Green Belt to form the basis of the assessment;
 - Stage 2: Baseline studies and analysis to inform considerations relevant to openness of the Green Belt and potential conflict with Green Belt purposes;
 - Stage 3: Identification of qualities to inform the assessment of preservation of openness and the identification of any conflict with Green Belt purposes; and
 - Stage 4: Assessment of sectors to identify:
 - whether the Project would preserve the openness of the Green Belt; and
 - whether the Project would conflict with Green Belt purposes.
- 4.2.2. These stages are described in further detail below.
- Stage 1: Identification of Sectors and Sub Areas within the Green Belt**
- 4.2.3. The sectors and sub areas used for the assessment are shown on Figure 2. The sectors are defined using clearly visible features such as roads or watercourses to divide one sector from another, utilising the sector identified as part of the 2015 study south of the Biomedical Campus as a starting point. This provides a clear and robust structure for the presentation of the assessment.

⁶ <https://www.cambridge.gov.uk/public/ldf/coredocs/rd-mc-030-part1.pdf>

- 4.2.4. The definition of the sectors, as described in the previous paragraph, does not reflect variations in land use, character or context, which occur in the majority of the sectors. To address this, all sectors are therefore divided into sub areas where there are clear changes in these characteristics that would affect the application of the assessment criteria to different areas of land. This enables a robust and transparent assessment of the various sub areas.

Stage 2: Baselines Studies and Analysis (Section 5 of this Report)

- 4.2.5. A series of studies were undertaken as part of the 2015 study, to build up an understanding of Cambridge and its surrounding landscape, in the context of the considerations which are relevant to the performance of Green Belt purposes and to inform the assessment of openness. These extended out far enough to cover the full extent of the Project from CBC to the A11. The studies cover a range of aspects which have a bearing on how the issues raised by Green Belt purposes (sprawl, merging, encroachment, setting and character) are manifested in Cambridge and its surrounding landscape or are perceived by residents or visitors to the city. They include matters relating to the physical form and scale of the city, its historical development, its relationship to its hinterland, townscape and landscape character, the experience of approaching and arriving at the city, and how the city is perceived from the surrounding landscape.
- 4.2.6. Townscape character assessment assists not only in identifying the historic core of the city but also in identifying other areas of townscape which are distinctive to Cambridge and contribute to its particular character. Its findings reflect the historical development of the city and contribute to an understanding of the nature of the urban edges which adjoin the Green Belt, and the character of the villages within the Green Belt. Landscape character assessment assists in identifying important components of the landscape setting of the city and the wider countryside, enabling it to be studied within its context, and the relationship between the city and its surroundings to be properly understood. These assessments are therefore of particular relevance to National Green Belt purpose 4 and Cambridge Green Belt purposes 1 and 2.
- 4.2.7. The findings of the baseline studies, so far as relevant to the areas affected by the Project, are summarised in section 5 of this report.
- 4.2.8. The findings of the baseline studies and analysis are presented on a series of drawings and photograph panels. Figures 3-11 show the extent of the proposed route and Travel Hub site. Figures 12-15 illustrate the key Green Belt considerations that relate to each sector. Figures 16-27 are photograph panels that illustrate the findings of the baseline analysis.

Stage 3: Identification of Qualities Relevant to Openness and Green Belt Purposes (Section 6 of this Report)

- 4.2.9. This stage draws from the surveys and analysis work in stage 2 to identify how the 16 qualities of the city and its surrounding landscape identified in the 2015 study, which directly contribute to openness and the performance of Green Belt purposes, relate to each of the assessment sectors.

Stage 4: Assessment of Sectors (Sections 8-11 of this Report)

- 4.2.10. Sections 8-11 of this report contain detailed assessments of the Project within each of the Green Belt sectors, in terms of whether the options preserve the openness of the Green Belt or would conflict with Green Belt purposes.
- 4.2.11. Initially, the 16 qualities identified in stage 3 are used as the criteria against which the sectors and sub areas are considered to identify key considerations relevant to openness and Green Belt purposes within each sub area. The assessments are presented in a tabulated format for each sector, with summary text at the end of the table drawing out the key points from the criteria-based assessment of each sub area under the two headings of openness and Green Belt purposes.
- 4.2.12. Within each sub area, the degree to which the Project would preserve the openness of the Green Belt is considered. This has two main aspects in relation to this assessment, the volume or physical size of the proposed development and its visual impact. Where either of these two aspects indicates a potential reduction in openness, other aspects are considered, including the duration of the effect and the purpose of the development.
- 4.2.13. For the purposes of the assessment, it is considered that:
 - Where the route is constructed over flat landform or across the face of a slope requiring relatively modest and balanced cut and fill to create the route, the necessary earthworks would not reduce openness. A reduction in openness could arise where the route is significantly elevated above existing ground levels or where there is more substantial cut and fill or a significant imbalance between cut and fill.
 - Where there would be a visible change to the character of the landscape, there may be a reduction in openness.
 - The introduction of buildings, shelters or built structures, such as solar panels, may result in a reduction in openness.
 - The surface of the guided busway and multi-use way, and any physical guides alongside the route would not reduce openness, subject to the extent of cut and fill required, as these are ordinary and unremarkable features of any road or local transport infrastructure within the Green Belt of a scale and nature that would not appear out of place.
 - The small-scale loss of parts of a field to hard standing, such as associated with the proposed bus stops, that are relatively minor and would not be out of context with the surroundings may not result in a reduction in openness.
 - Where the loss of agricultural land is of a scale that in its wider landscape context could be considered minimal, this may not cause a conflict with Green Belt purposes.
 - Signage, lighting and road markings near road crossings or proposed bus stops would not reduce openness as these are typical features that can occur along any road or local transport infrastructure within the Green Belt.

- 4.2.14. Within each sub area, any potential conflict with Green Belt purposes as a result of the Project is also assessed, using the 16 'Qualities Relevant to Openness and Green Belt Purposes' identified at stage 3 as the starting point. For the purposes of this report, any negative effect on a particular Green Belt purpose, even if only slight, is considered to be a conflict with the Green Belt purpose. However, the degree of this conflict may not be sufficient to exceed the test of paragraph 154(h) of the NPPF and is given further consideration in the Planning Appraisal prepared by Strutt & Parker.
- 4.2.15. The assessments conclude with commentary on whether the Project preserves openness or conflicts with Green Belt purposes within each sector. This is followed by a separate judgement on the degree of any reduction in openness or potential Green Belt conflict. The following scale is used for the degree of reduction in openness or conflict:

Major	Total or major alteration to key elements, features, qualities or characteristics relevant to Green Belt openness or purposes, such that post development the baseline would be fundamentally changed.
Moderate	Partial alteration to key elements, features, qualities or characteristics relevant to Green Belt openness or purposes, such that post development the baseline would be noticeably changed.
Minor	Minor alteration to key elements, features, qualities or characteristics relevant to Green Belt openness or purposes, such that post development the baseline would be largely unchanged despite discernible differences.
Negligible	Very minor alteration to key elements, features, qualities or characteristics relevant to Green Belt openness or purposes, such that post development the baseline would be fundamentally unchanged with barely perceptible differences.

- 4.2.16. It may be possible for a proposal to reduce the openness of the Green Belt in a specific location whilst overall openness is preserved or to conflict with a Green Belt purpose to some degree without compromising the overall purposes of the Green Belt. This forms part of the planning balance and the considerations under paragraph 154(h) of the NPPF.

4.3. Construction effects

- 4.3.1. During the construction phase, there will be a number of construction compounds along the guided busway and at the Travel Hub site. The compounds are expected to include offices and welfare facilities, parking for site staff and plant, and storage of materials, all within secure fenced boundaries. The compounds would be lit at night. In addition, there will be a number of materials storage areas along the guided busway route. Given the size of the compounds and storage areas, their visibility and the likely level of activity, it is considered that they would cause a reduction in the openness of the Green Belt but this would be for a relatively short duration (two to four years), following which the compounds would either become permanent stops along the route or be reinstated to agricultural use. Given that NPPF paragraph 142 states that one of the essential characteristics of Green Belt is permanence, it is considered that greater emphasis should

be given to longer term considerations and that consequently any temporary reduction in openness during the construction phase is consistent with preserving the openness of the Green Belt in the longer term for the purposes of NPPF paragraph 154(h).

- 4.3.2. Since construction compounds, materials storage areas and construction activities will be temporary and are a relatively common occurrence in rural areas, it is considered that they will not give rise to any conflict with Green Belt purposes.
- 4.3.3. For these reasons, the detailed assessments in sections 8-11 of this report do not consider construction-phase effects.

5.0 Baseline Studies and Analysis

5.1. Introduction

5.1.1. As stated above, this section summaries the key findings of a series of studies undertaken in the 2015 study, which build up an understanding of Cambridge and its surrounding landscape, focussing on considerations that are relevant to the performance of Green Belt purposes. These covered a range of aspects that have a bearing on how the issues raised by Green Belt purposes are manifested in Cambridge and its surrounding landscape or are perceived by residents or visitors to the city. They include matters relating to the physical form and scale of the city, its historical development, its relationship to its hinterland, townscape and landscape character, the experience of approaching and arriving at the city, and how the city is perceived from the surrounding landscape. Whilst these studies were originally undertaken to understand the contribution of the Cambridge Green Belt to Green Belt purposes, they also inform consideration of openness.

5.1.2. The material has been checked, validated and updated as necessary for the purposes of the present study, by means of desktop studies, site survey and analysis.

5.1.3. Since the 2015 study, a retirement village development has been consented on the edge of Stapleford. The description of development for the consented development (application ref. 20/02929/OUT) is:

“Outline planning for the development of land for a retirement care village in Use Class C2 comprising housing with care, communal health, wellbeing and leisure facilities, public open space, landscaping, car parking, access and associated development and public access countryside park with all matters reserved except for access.”

5.1.4. The outline consent establishes the principle of a retirement village on the north east edge of Stapleford, north west of Haverhill Road, with access of Haverhill Road. To the north east of the proposed retirement village, a 19Ha country park is proposed. A s.106 agreement and deeds of variation have been completed so as to ensure, as far as possible, that this development does not fetter the making of the TWA Order and implementation of the Project.

5.2. Historical Development of Cambridge and the Villages

5.2.1. Key points:

- Location of Cambridge at a meeting point of several landscapes: Fens to the north and east, Claylands to the west, Chalk Ridge to the south and east.
- A small town until the 19th century.
- Substantial growth during the 19th and 20th centuries, continuing into the early 21st century.

- Expansion of the city southwards has included Addenbrooke's Hospital/CBC and early/mid 20th century leafy estates.
- Varied local factors influencing the location and form of villages.
- Distinctive character of many villages and notable landscape features within them.

5.3. Environmental Designations

5.3.1. There are numerous environmental designations within Cambridge and the Green Belt, covering a range of habitats and with many different reasons for designation, which contribute to the character and setting of the city. Those within the area covered by the Project are shown on Figure 3.

5.3.2. Key points:

- Several environmental designations in the vicinity of the proposed route and Travel Hub.
- SSSIs covering Gog Magog Golf Course (Gog Magog Hills), Sawston Hall Meadows, and Dernford Fen.
- Local Nature Reserves covering the Nine Wells south of CBC and The Beechwoods east of Babraham Road Park and Ride.
- A City Wildlife Site covering a hedgerow west of Babraham Road, on the boundary of the CBC.
- County Wildlife Sites covering the Shelford-Haverhill Disused Railway (section between High Street and A505 slip road) and the River Granta.

5.4. Cultural Heritage Designations

5.4.1. Figure 4 shows cultural heritage designations within the relevant section of the Cambridge Green Belt, which contribute to the character and setting of the city.

5.4.2. Key points:

- Conservation Areas and listed buildings in Great Shelford and Stapleford, the southern part of Sawston, Great and Little Abington and Babraham.
- Registered Parks/Gardens and listed buildings at Sawston Hall and Pampisford Hall.
- Scheduled Monument at Hobson's Brook west of Nine Wells, within Wandlebury Country Park and Magog Down, along road verge of A505 at Pampisford, at River Cam west of Sawston and Whittlesford.
- Further listed buildings at Nine Wells, Middlefield, between Sawston and Babraham, and east of the A11 on Newmarket Road.

5.5. Recreational Routes and Country Parks

5.5.1. Figure 5 shows recreational routes within and through the Cambridge Green Belt, as well as the locations of country parks close to the edge of Cambridge. These contribute to the

character and setting of the city, and also allow access into the countryside close to the edge of the city.

5.5.2. Key points:

- Limited rural rights of way network, predominantly direct routes between villages e.g. Great Shelford and Stapleford, Babraham and Sawston.
- Long distance footpath route through area (E2 European Long Distance Route between CBC and A11), east of Wandlebury Country Park.
- National Cycle Route through area (from CBC to A505), through Great Shelford and Sawston.
- Wandlebury Country Park in the rural landscape east of the A1307.

5.6. Topography and Geology

5.6.1. Figure 6 illustrates the topography of the Cambridge Green Belt and the surrounding area.

5.6.2. Key points:

- Topography reflects one of the three main landscapes that surround Cambridge: Chalk Hills. It also reflects the River Valleys landscapes present south and east of Cambridge.
- The proposed route runs through gently undulating river valleys of Hobson's Brook and the River Granta, occasionally rising up the lower valley slopes of the chalk hills.
- The proposed Travel Hub is located on slightly higher but gently undulating landform to the north of the River Granta.

5.7. Townscape Character

5.7.1. Townscape character assessment (see Figure 7) assists not only in identifying the historic core of the city but also in identifying other areas of townscape which are distinctive to Cambridge and contribute to its particular character. For this report the townscape character of Sawston and Babraham has been identified to be consistent with other settlements, as this was previously only identified for Cambridge and Green Belt villages considered to be necklace villages.

5.7.2. Key points:

- The southern fringe of Cambridge consists of a mix of Colleges and University Buildings, 21st Century Mixed Use Development and 1900-1945 Suburban Housing.
- Great Shelford and Stapleford retain historic cores surrounded by predominantly Post-war Suburban Housing, with limited 21st Century Mixed Use Development.
- Sawston also retains a historic core but has rapidly expanded with Post-war Suburban Housing and 21st Century Mixed Use Development.
- Babraham has experienced very little modern development.

5.8. Landscape Character

5.8.1. The characterisation approach adopted for the built area of Cambridge has been extended into the landscape (see Figure 8). Understanding landscape character is fundamental to understanding what gives a landscape its distinctive identity. Landscape character assessment assists in identifying important components of the landscape setting of a settlement. It enables the settlement to be studied within its context, and the relationship between the settlement and its surroundings to be properly understood. This assessment has only been undertaken within the boundaries of the Green Belt, since areas beyond the Green Belt boundary are not relevant to this study.

5.8.2. Key points:

- One of the main landscapes around Cambridge is present in the form of the Chalk Hills. The River Valleys landscape type is also present.
- The proposed route would pass through areas of the River Valleys and an area of the Chalk Hills.
- The proposed Travel Hub is located within the River Valleys.

5.9. Green Corridors into Cambridge

5.9.1. Green corridors are widths of countryside or green space, with public access, penetrating from the open countryside into the urban fabric of Cambridge. They provide the settings for open approaches into the city, access for pedestrians and cyclists out into the countryside, corridors for wildlife, and a landscape setting to some edges of the city. They are shown on Figure 7.

5.9.2. Key points:

- The green corridor along Hobson's Brook provides the setting for an important open approach into the city from the south, along the railway line. However, the green corridor does not continue further south into the Green Belt.

5.10. Visual Assessment

5.10.1. Figure 9 shows the results of a visual assessment of Cambridge, with particular emphasis on the interrelationship between the city edge and the surrounding landscape.

5.10.2. Key points:

- Views of CBC buildings as key landmarks on the edge of the city.
- Key views to Cambridge from the surrounding landscape, including elevated views from Clarke's Hill, Fox Hill and Magog Down. However, views are generally away from the proposed route and Travel Hub site.
- Character of the urban edge as seen from the countryside is generally mixed.

5.11. Approaches and Gateways

- 5.11.1. This section describes the relevant aspects of the approaches and gateways to Cambridge shown on Figure 10. Approaches to Cambridge from the surrounding countryside generally have a rural character. Approaches to and within the urban area provide the viewpoints from which most visitors see the city and gain their perception of its scale. Distance and travel time between open countryside and Distinctive Cambridge (i.e. the historic core and areas of Distinctive townscape/landscape), and the character of the approaches, play an important role in determining people's perception of the character and scale of the city. The length of approaches therefore provides a fair representation of how people perceive the scale of Cambridge, given that an important part of its character is its compactness.

Hills Road

- 5.11.2. The south eastern approach to Cambridge along Babraham Road and Hills Road is a historic route, which passes over the Gog Magog Hills. The first view of the city is an elevated panoramic view from the top of the hill near the Haverhill Road junction. The urban gateway is marked by suburban housing and CBC, which is a prominent landmark on the edge of the city. Hills Road is a green treed road with large detached and semi-detached houses set back from the road.

Rail approach from the South (London)

- 5.11.3. The rail approach to Cambridge from the south is mainly green and rural in character, as the railway line passes through a green corridor alongside Hobsons Brook, although development at CBC and Clay Farm are visible. The urban gateway is marked by CBC to the east, which is a prominent landmark on the edge of the city, and Clay Farm.

5.12. Pattern of Distribution of Villages

- 5.12.1. Cambridge is surrounded by an open rural landscape containing a number of villages. Villages are scattered throughout the Cambridge Green Belt, with patterns related to their origins and development over time. Figure 8 shows landscape types and character areas, each with their characteristic settlement pattern. Villages in the Chalk Hills landscape type south and east of Cambridge are relatively scarce due to the shortage of ground or surface water and settlement is often limited to a few scattered farms. Numerous villages have developed in the River Valley landscape type to the south due to the proximity of fresh water, many having been established at the crossing-points of watercourses.
- 5.12.2. Analysis has identified a circle of inner necklace villages. These are villages that, due to their close proximity to Cambridge, play a particularly important role in the immediate setting of the city. More distant villages also play a role, particularly as people see them as they travel to and from Cambridge, and as they are seen in panoramic views of the city.
- 5.12.3. Great Shelford and Stapleford combined form one of the necklace villages around Cambridge and remain physically separated from Cambridge within the area of interest by Hobson's Brook and the railway corridor to the north and White Hill and Clarke's Hill to

the north-east. The proposed development on the edge of Stapleford will extend the village north-eastwards, but the separation from Cambridge will remain.

- 5.12.4. Sawston forms one of the villages located within the Granta Valley and along the A1301 that has expanded through cluster development and remains physically separated from Cambridge by the River Granta and the wider countryside.
- 5.12.5. Babraham, to the east of Sawston, remains physically separated from Cambridge by both physical distance and the Gog Magogs.
- 5.12.6. Great Abington to the east is located outside the Green Belt, so is not relevant to this study.
- 5.12.7. Key points:
 - Villages scattered throughout the Green Belt, with their distribution reflecting local landscape characteristics.
 - Presence of villages close to Cambridge contributes significantly to the quality of the setting of the city.
 - Maintaining separation between Cambridge and the inner necklace villages, and between the villages themselves is important to the setting of the city but is under threat in some instances.

5.13. Character and Identity of Villages

- 5.13.1. Each village possesses qualities which contribute positively to their character and identity and therefore to the quality of the setting of Cambridge.
- 5.13.2. Great Shelford and Stapleford have combined to form one of the large necklace villages around Cambridge. The scale and form of the settlements has been radically changed by the extensive recent development, which has also continued in a north-west direction along Cambridge Road, towards Trumpington causing these adjacent villages to merge, and will also continue north eastwards from Stapleford when the new consented development is implemented. It retains its historic core at the centre of the village, with areas of countryside immediately adjacent to this historic core, south and east of the village. Sawston also retains its historic core and has undergone cluster expansion. Babraham has remained a linear settlement but has undergone limited expansion with the exception of the Babraham Research Campus to the north which has a separate character and identity.
- 5.13.3. Key points:
 - Villages vary in their size, form and other qualities, so that each village has its own particular character and identity.
 - Individual identity is most intact in villages which avoided large 20th century expansion but has been diluted in those which saw significant 20th century growth.
 - Inner necklace villages enrich the setting of Cambridge and emphasise the rural character of the landscape surrounding the city.

5.14. Townscape and Landscape Role and Function

- 5.14.1. The assessment of the 'function' that townscape and landscape plays in contributing to the distinctiveness of Cambridge (see Figure 11) and its setting is based on a methodology established by LDA Design and endorsed by the Countryside Agency (The Countryside Agency and Scottish Natural Heritage, 2002).
- 5.14.2. Supportive Townscape/Landscape consists of those areas of townscape/landscape that support the character of the Historic Core and Distinctive areas of the city. They provide the backdrop and ambience, and bolster the sense of place of the city and its approaches. Supportive areas and features are of a kind that may be found in other towns and cities but, due to their particular location or the way they influence the character and setting of the city, they are locally distinctive, recognisable to those familiar with the city as important elements of its character and identity.
- 5.14.3. Connective Townscape/Landscape consists of those areas of townscape/landscape that are an integral part of the city and its environs but may lack individual distinction or do not make a significant contribution to the setting of the city. This does not signify that these areas are unimportant or lacking in their own identity; they may have significant merit in their own right. Rather, they are often areas with little relationship to their landscape setting, or to landmarks within the Historic Core or its landscape setting. Due to their location or character, they may contribute little to views of the city or other elements of its setting. Generic development forms with little sense of place can also contribute to the loss of local identity.
- 5.14.4. Key points:
 - Supportive landscape south of the city, including the Gog Magog Hills, which lie close to the city and provide elevated vantage points for panoramic long distance views across open countryside in the foreground and the city in the middle distance.
 - Areas of Connective townscape/landscape present along the western edge of Great Shelford and around CBC, and may still be important but, depending on individual circumstances, may have potential to accommodate change.
 - Landscape south of Great Shelford and Gog Magog Hills is classified as Outer rural areas of the Green Belt.

5.15. Summary of Baseline Studies and Analysis

- 5.15.1. The studies and analysis presented in this section enable a thorough understanding of aspects of Cambridge and its surrounding landscape that are relevant to openness and Green Belt purposes. The main findings arising from the various studies that are relevant to the Project are summarised below and lead to the identification of qualities that directly contribute to openness and the performance of Green Belt purposes. These qualities are set out in section 6.
- 5.15.2. The main findings drawn from the studies and analysis contained in this section are:

- There are relatively few environmental and cultural heritage designations in the vicinity of the proposed route and Travel Hub site, with key designations including the Registered Parks and Gardens at Sawston Hall and Pampisford Hall, Conservation Areas in the main villages and the County Wildlife Sites at Nine Wells and along the River Granta and part of the disused Shelford-Haverhill railway line.
- The rights of way network in the vicinity of the proposed route and Travel Hub site is relatively sparse, although there are still good links between settlements.
- The city has its origins at the meeting point of three landscapes which, in terms of topography and landscape character, are still readily apparent in the landscape surrounding the city at the present day. The route and Travel Hub site are located along the edge of the chalk hills associated with the Gog Magogs.
- There is an area of Supportive landscape along the southern edge of Cambridge, reflecting the important role played by the landscape in the setting of the city.
- The villages surrounding Cambridge are a notable feature, with their distribution reflecting the historic qualities of the landscape, and some villages very close to the city edge. Great Shelford, Stapleford and Sawston have all undergone expansion but retain a rural setting, and are separated from Cambridge by open countryside, the chalk hills and in the case of Sawston the River Granta.

6.0 Qualities Relevant to Openness and Green Belt Purposes

6.1. Introduction

- 6.1.1. The baseline studies and analysis summarised in section 5 were undertaken to gain a good understanding of Cambridge and its surroundings, focussing on considerations which are relevant to the performance of Green Belt purposes and openness. From this work, it is apparent that the National Green Belt purposes, Cambridge Green Belt purposes and openness are manifested and performed in various ways specific to Cambridge and its surrounding landscape. This section draws from the 2015 study, which defined 16 qualities of Cambridge and its surrounding landscape which directly contribute to the performance of Green Belt purposes.
- 6.1.2. The 16 qualities are explained in detail in the 2015 study, which is replicated in the remainder of this section where relevant to this study. Further information that is not relevant to the areas covered by this study is provided in the 2015 study. The qualities are not listed in order of importance. They are all important and each contributes to the performance of Green Belt purposes, as well as an understanding of openness.
- 6.1.3. In terms of Green Belt purposes, the table on the following pages shows the relationship between each of the 16 qualities, the National Green Belt purposes and Cambridge Green Belt purposes. The majority of these qualities contribute to the performance of more than one Green Belt purpose. The table also identifies which qualities are relevant to each of the assessment sectors, as some of the qualities relate more specifically to the edge of the city, whilst others are more relevant in the rural areas.
- 6.1.4. As set out in the methodology in Section 4 of this report, the 16 qualities are used as the criteria for assessing the current level of openness and the contribution to Green Belt purposes of the three sectors and sub areas discussed in section 4.2 and shown on Figure 2. This forms the starting point for the assessment of any potential conflict with Green Belt purposes resulting from the proposed route and Travel Hub site. The test relating to preservation of openness is addressed separately, as discussed in Section 4.2.

Qualities Relevant to Openness and Green Belt Purposes	National Green Belt Purposes				Cambridge Green Belt Purposes			Relevance to Green Belt Sectors			
	1. Sprawl	2. Merging	3. Encroachment	4. Setting/ Character	1. Character	2. Setting	3. Merging	Sector I	Sector II	Sector III	Sector IV
1. A large historic core relative to the size of the city as a whole	*			*	*			*			
2. A city focussed on the historic core				*	*			*			
3. Short and/or characteristic approaches to the historic core from the edge of the city	*			*		*		*			
4. A city of human scale easily crossed by foot and by bicycle	*			*	*			*			
5. Topography providing a framework to Cambridge				*		*		*	*	*	*
6. Long distance footpaths and bridleways providing access to the countryside				*		*		*	*	*	*
7. Key views of Cambridge from the surrounding landscape				*		*		*	*		
8. Significant areas of Distinctive and Supportive townscape and landscape				*	*	*		*	*		
9. A soft green edge to the city			*	*		*		*			
10. Good urban structure with well-designed edges to the city	*							*			
11. Green corridors into the city	*			*	*	*		*			
12. The distribution, physical and visual separation of the necklace villages		*		*	*	*	*	*	*	*	*
13. The scale, character, identity and rural setting of the necklace villages		*		*		*	*	*	*	*	*
14. Designated sites and areas enriching the setting of Cambridge				*		*		*	*	*	*
15. Elements and features contributing to the character and structure of the landscape	*			*		*		*	*	*	*
16. A city set in a landscape which retains a strongly rural character			*	*		*		*	*	*	*

6.2. Qualities

1. A Large Historic Core Relative to the Size of the City as a Whole

- 6.2.1. This quality is concerned with compactness, identified by Holford and Myles Wright in their 1950 report (The Holford Report) as being an important characteristic of the city. Cambridge Green Belt purpose 1 refers to 'a compact, dynamic city with a thriving historic centre'. In addition to being a key part of the special character of the city, it is also relevant to the issue of urban sprawl, which would reduce the relative size of the historic core in proportion to the size of the entire city.
- 6.2.2. In the case of Cambridge, its special historic character depends not only on the relatively large and intact historic core, but also on the fact that this has not been 'swamped' by more recent development. Despite the presence of business parks and post-war peripheral housing estates and other development, the scale of the historic core relative to the overall city is such that Cambridge still retains its historic character. If substantial peripheral development were to be permitted in Cambridge, more modern development would begin to dominate and, as the scale of the historic core is fixed, it would be inevitable that the overall historic character of the settlement would begin to be eroded. If Cambridge were to grow beyond a certain point, it would no longer have the character of a historic city, but rather would become merely a city with a historic core - a very different character of settlement. Development has already extended furthest from the historic core to the east and south of the city, in a largely unstructured way that gives the impression of urban sprawl.
- 6.2.3. The issue of scale is, therefore, of vital significance to the protection of the special character of Cambridge. It needs to retain the feeling of being a small city, one still dominated by its historic core, if it is to retain its special character. The Green Belt has an essential role to play in this and the prevention of sprawl.

2. A City Focused on the Historic Core

- 6.2.4. This quality is also relevant to compactness and to Cambridge Green Belt purpose 1. The study by Colin Buchanan and Partners in 2001 (The Buchanan Report) emphasised the importance of the city's historic core and associated university colleges as part of the special character of Cambridge. The buildings and historic core are also identified as Defining Character in the Cambridge Landscape Character Assessment of 2003 (CLCA).
- 6.2.5. The 2015 study describes how Cambridge did not expand much beyond its medieval limits until the 19th century. Today, despite extensive expansion since that time, Cambridge is formed of a network of neighbourhood hubs and commercial areas or developments (such as industrial development around the railway and Cambridge Science Park) located around a single core, which is focused on the medieval area. The core is a vibrant social, cultural and economic focus to the city. There are a finite number of compact, single centred historic cities in the England and this aspect of Cambridge is an important quality that should be safeguarded. The Green Belt plays an important role in this.
- 6.2.6. There is a danger that, if the city expands much beyond its current size, the existing core will not be accessible to residents of the outer areas of the city due to the distance, and

inconvenience of travelling, between residential areas and the centre. This might lead to the development of alternative urban cores that provide the economic and social focus for large areas of the city, competing with the historic centre and irretrievably altering the historic form and function of Cambridge.

3. Short and/or Characteristic Approaches to the Historic Core from the Edge of the City

- 6.2.7. This quality is again associated with compactness and sprawl and is also key to the perception of Cambridge as a historic city when approaching and arriving. The Holford Report identified *'open countryside near the centre of the town on its west side'* as an important characteristic, which is reflected in short, characteristic approaches to the historic core from the west. The importance of a sense of arrival is also emphasised in the CLCA.
- 6.2.8. Approach routes into Cambridge provide the viewpoints from which most visitors see the city and gain their initial perception of it. Short and/or characteristic approaches are shown on Figure 10. The shortest and most characteristic approaches between open countryside and distinctive Cambridge lie to the south and west. The railway line into Cambridge from the south passes through open countryside or green landscape almost to the station. These approaches should be safeguarded. However, the road approaches into Cambridge from the south are longer and less distinctive.
- 6.2.9. It is also important that longer and unremarkable approaches into the city are not degraded further as they all play a role in contributing to people's perception of Cambridge. In particular, ribbon development along all routes into Cambridge should be avoided, especially where this would narrow the gap between the city and necklace villages.

4. A City of Human Scale Easily Crossed by Foot and by Bicycle

- 6.2.10. This quality is also concerned with compactness and sprawl but is unrelated to Cambridge's historic character. It is concerned with how people living and working in the city perceive its compact scale in their day to day lives.
- 6.2.11. Cambridge has a tradition of cycling. Much of the population travel the city by foot or by bicycle. This is made possible by the relatively small size of the city. As Cambridge expands, so does the distance of travel between different parts of the city.
- 6.2.12. The centre and the west sides of Cambridge are of a small, human scale and easily crossed by foot and bicycle. This is a quality of Cambridge, in which the Green Belt plays an important part.
- 6.2.13. The north, east and south sides are much larger and the quality of Cambridge as a city of human scale, easily crossed by foot and by bicycle, has already been eroded. Further erosion of this quality can be prevented by ensuring that Cambridge does not expand significantly further, and by creating and managing a good network of paths and cycleways.

5. Topography Providing a Framework to Cambridge

- 6.2.14. This quality is central to understanding the setting and history of the city, reflecting Cambridge's origins and location at the meeting point of three landscapes. The

significance of topography as a component of the setting of the city is recognised in the CLCA, which identifies ‘high ground’ as a Defining Character.

- 6.2.15. The landform surrounding Cambridge is illustrated on Figure 6. The relationship of the city to the topography is one of the key defining qualities of Cambridge.

6. Long Distance Footpaths and Bridleways Providing Access to the Countryside

- 6.2.16. Once Green Belts have been defined, the NPPF states that they have positive roles to play, including “*looking for opportunities to provide access*” (paragraph 151). The accessibility of the countryside surrounding Cambridge is an important aspect of its setting, enabling people to appreciate the landscape setting and the relationship between the city and countryside.
- 6.2.17. Long distance routes, and also shorter, local footpaths and bridleways providing access into the countryside in the immediate vicinity of Cambridge, are important qualities of the setting and special character of the city that should be preserved and continue to be enhanced.

7. Key Views of Cambridge from the Surrounding Landscape

- 6.2.18. This quality is also an important element of the setting of Cambridge. Views of the historic core are one of the aspects that were identified in the Structure Plan 2003 to be of particular importance to the quality of the city. They are also identified as Defining Character in the CLCA and are identified in the South Cambridgeshire Local Plan 2018 (SCLP) as an aspect of the special character of Cambridge.
- 6.2.19. There are a number of viewpoints that are important, and the qualities of these views should be preserved and, where possible, enhanced. The viewpoints identified on Figure 9 are amongst the most important on the south side of the city, as it is from these locations that people can best appreciate the various qualities of Cambridge. All viewpoints identified provide different views of landmark features or defining characteristics of the city.
- 6.2.20. There are key views towards the southern edge of Cambridge from the Gog Magog Hills, including Clarke’s Hill, Fox Hill and Magog Down. In many of these views, Addenbrooke’s Hospital and the Biomedical Campus are prominent. Care must be taken to ensure these key views are not degraded further by inappropriate peripheral development. However, the proposed Travel Hub is located in the opposite direction to the majority of key views and beyond the area of the Green Belt from which Cambridge can be seen.

8. Significant Areas of Distinctive and Supportive Townscape and Landscape

- 6.2.21. The 2015 study demonstrates how areas of Distinctive and Supportive townscape and landscape contribute most strongly to the distinctiveness of Cambridge and its setting. They are, therefore, important areas to protect. However, as discussed in that study, these areas are not in every respect of greater importance than the remaining areas of influence (with the exception of Visually Detracting Townscape/Landscape), as all areas play a crucial role in the setting and perception of the city. The importance of Connective Townscape/Landscape and Outer Rural Areas lies in linking between and forming a foil to areas of Historic Core and Distinctive and Supportive townscape and landscape.

- 6.2.22. Figure 11 identifies Supportive townscape and landscape as the most essential areas to be safeguarded from the adverse effects of development. However, other areas should also be safeguarded from change which would cause adverse effects on the qualities of the setting and special character of Cambridge.

9. A Soft Green Edge to the City

- 6.2.23. The Buchanan Report referred to the interface between the city and the countryside as being an aspect of Cambridge's special character and the CLCA refers to edges as having the potential to be either Defining Character or Supporting Character. Soft green edges contribute significantly to the setting of the city, particularly on its west side. They also play a role in National Green Belt purpose 3 in reducing the urbanising influences of the built area on the adjacent countryside.
- 6.2.24. It is important to preserve existing soft green edges and to seek opportunities for planting to improve existing or future city edges which lack this quality. However, the southern edge of Cambridge is currently mixed rather than green, although designed to have a soft green edge in the future as it matures.

10. Good Urban Structure with Well Designed Edges to the City

- 6.2.25. This quality is of relevance to National Green Belt purpose 1. One of the factors that contribute to urban sprawl is poorly designed urban edges which do not create a well-considered long-term edge to a city. From the available plans, developments currently under construction at CBC will have a good urban structure and provide a well-designed edge to the city that can be expected to endure for the long term.

11. Green Corridors into the City

- 6.2.26. The Holford Report referred to '*green wedges along the river*' as being an important quality and they are also identified as such in the Buchanan Report, the City Council's 2002 Inner Green Belt Boundary Study⁷, the Structure Plan 2003, the CLCA and the SCLP. They are key components of the character and setting of the city and also play an important role in maintaining urban structure and thus reducing sprawl. These corridors should be safeguarded from development that would harm their character or compromise their function.
- 6.2.27. The Cam corridor is a key defining element of historic Cambridge and its setting and it is essential that it should be preserved. The Hobson's Brook green corridor should remain open and provides opportunities for enhanced access between the city and the countryside, particularly at CBC and Clay Farm.

12. The Distribution, Physical and Visual Separation of the Necklace Villages

- 6.2.28. This quality is also mentioned in the Holford Report, the Buchanan Report, the City Council's 2002 Inner Green Belt Boundary Study, the Structure Plan, the CLCA and the

⁷

<https://www.cambridge.gov.uk/public/ldf/coredocs/Inner%20Green%20Belt%20Boundary%20Study%202002%20pdf%20version%2024.4.05.pdf>

SCLP. It has long been regarded as an important component of the character and setting of the city and is clearly related to National Green Belt purpose 2.

- 6.2.29. It is essential to preserve the pattern of distribution of villages around Cambridge and their physical separation from other settlements. The Green Belt provides protection for the countryside around and between settlements. Although all areas of open countryside in the Green Belt play a role to a greater or lesser extent in separating settlements, those areas of land that are considered to be most critical in separating settlements within the immediate setting of Cambridge must be protected. The role of individual areas in maintaining separation between settlements requires careful consideration of topography and vegetation, which can prevent intervisibility, and of land that is perceived as being part of the setting of a particular village and thus 'belonging' to that village rather than another.

13. The Scale, Character, Identity and Rural Setting of the Necklace Villages

- 6.2.30. The Buchanan Report specifically refers to the character of the villages surrounding the city, and the qualities of setting, scale and character of the villages are also referred to in the SCLP. The varying sizes and character of the villages, each with their own distinct identity, is an important component of the setting of the city.
- 6.2.31. It is apparent that the villages that saw significant growth in the 20th century have become more generic and are less distinctive than those that saw little growth, where the historic character and the relationship between all parts of the village and the surrounding landscape remains largely intact.
- 6.2.32. The rural setting of villages is also a fundamental component of their character. Despite the proximity of Cambridge, all the villages within the study area retain an entirely or largely rural character and it is essential that this should remain the case. The Green Belt has a critical role to play in protecting these qualities of the necklace villages.

14. Designated Sites and Areas Enriching the Setting of Cambridge

- 6.2.33. Designated sites are identified as Supporting Character in the CLCA or, in some circumstances, potentially Defining Character. The SCLP identifies them as a component of the special character of Cambridge.
- 6.2.34. All features, sites and areas covered by environmental, cultural and access designations are important elements that enrich the appearance of the landscape and people's experience of it. They are all part of the setting and special character of Cambridge that should be preserved.

15. Elements and Features Contributing to the Character and Structure of the Landscape

- 6.2.35. This quality is defined as Supporting Character or, on occasion, Defining Character in the CLCA and is identified in the SCLP as a component of the special character of Cambridge. In addition to contributing to the character and setting of the city, this quality is relevant to National Green Belt purpose 1 in that a strong landscape structure provides containment and natural barriers to inhibit urban sprawl.
- 6.2.36. There is a pattern of elements and features within the city and the landscape, ranging from large scale features such hills, rivers, woodlands and tall University buildings, to smaller

scale elements such as hedgerows, farm buildings, and a network of smaller watercourses, that are fundamental to the character of different landscape character areas, and also to the setting and special character of Cambridge.

16. A City Set in a Landscape which Retains a Strongly Rural Character

- 6.2.37. The *'open countryside near the centre of the town on its west side'* is identified as important in the Holford Report, and the SCLP identifies this quality as a component of the special character of Cambridge. In addition to character and setting, it is also relevant to National Green Belt purpose 3, in that a strongly rural landscape indicates that encroachment on the countryside is being resisted, whereas countryside that is significantly affected by urban influences creates a perception of encroachment.
- 6.2.38. It is important that the landscape surrounding Cambridge retains this rural character. The rural nature of the landscape around Cambridge is a key quality of the setting and special character of the city, particularly in providing a setting to the urban form when seen in key views, in providing settings to necklace villages, and in contributing to people's perception of the city as they approach it along communication routes.

7.0 Green Belt Sector Assessments

7.1. Introduction

- 7.1.1. The following sections of the report assess the four sectors of the Green Belt identified on Figure 2, to: understand the key considerations for each sector in relation to openness and their performance in relation to Green Belt purposes; consider whether the Project could be delivered whilst preserving the openness of the Green Belt; identify any potential conflicts with Green Belt purposes; and finally to identify the degree of any potential reduction in openness or conflict with Green Belt purposes.
- 7.1.2. The sector assessments are presented in a consistent manner using a standard template. After a brief introduction giving an overview of the sector, the sector is assessed against each of the qualities identified in section 6.2, that are relevant to the sectors being assessed (see table at the end of Section 6.1), to ensure that each sector is considered in relation to all criteria which are relevant to the Green Belt openness and purposes. All sectors are divided into sub areas where the assessment of one or more criteria differs between one part of the sector and another. Sub areas are presented as separate columns within the sector assessment but, where the assessment against a particular criterion is the same for all sub areas, the columns are merged. If the Project is unlikely to affect a particular sub area, as a result of the application of the assessment criteria, assessment of that sub area has been omitted. This is the case for sub areas I.A, III.A, III.B and IV.A.
- 7.1.3. Following the criteria-based assessment, conclusions relevant to openness and Green Belt purposes are summarised, drawing out the key points from the criteria-based assessment. This is followed by assessment of the extent to which the openness of the Green Belt will be preserved by the proposals, identification of any potential conflicts with Green Belt purposes, and where necessary, identification of the degree of any potential conflict with openness or Green Belt purposes.

8.0 Assessment of Sector I: South of Addenbrooke's

8.1. Description of Sector

- 8.1.1. Sector I is located to the south of Cambridge, between the city and Great Shelford, and extends onto the foothills of the Gog Magog Hills (see Figure 12). It formed Sector 10 of the 2015 study. Pursuant to a recommendation in the 2015 study, an area of land south of CBC was removed from the Green Belt and therefore from this sector. CBC and associated new developments, including housing on the Bell School site, form the northern boundary, creating a barrier between this sector of Green Belt and the rest of the city. The A1307 forms the eastern boundary of this sector. The Cambridge-London railway line forms the western boundary of the sector. Granham's Road is located to the south of much of the sector, with a single field located to the south of Granham's Road, forming sub area I.A and extending south to the parallel Hinton Way. Sub area I.C contains the distinctive landform of White Hill.
- 8.1.2. Land use is predominantly arable farmland throughout the sector (see Photograph 4 on Figure 16). Much of the farmland is large scale, but smaller field parcels are located on White Hill, along with a wooded hilltop and tree belts. This sector also includes Nine Wells Local Nature Reserve in the north west and a hedgerow west of the A1307 Babraham Road, on the northern boundary, that is designated as a City Wildlife Site. Rights of way through the area comprise National Cycle Route 11 along the western boundary and a public footpath from Granham's Road to Nine Wells (see Photograph 1 at Figure 16).
- 8.1.3. Three sub areas have been identified within this sector. Of these, the Project is unlikely to affect sub area I.A, given distance from it. Sub area I.A is therefore not assessed below.

8.2. Baseline Assessment of Qualities Relevant to Green Belt Openness and Purposes

- 8.2.1. Figure 12 illustrates the key considerations relevant to both openness and Green Belt purposes in sector I.

Qualities Relevant to Green Belt Openness and Purposes	Sub Area I.B – north of Granham's Road	Sub Area I.C – White Hill
1.A large historic core relative to the size of the city as a whole	Despite the ongoing development associated with CBC and of substantial housing areas south of the historic core, the scale of the historic core relative to the overall city still currently remains such that Cambridge as a whole retains its historic character. This sector is relatively remote from the historic core, with the adjacent development having little sense of connection with the historic character of the city. The extent of development on this side of the city gives an impression of urban sprawl. This sector plays an important role in restricting further growth of the city in this direction.	

Qualities Relevant to Green Belt Openness and Purposes	Sub Area I.B – north of Granham's Road	Sub Area I.C – White Hill
2.A city focussed on the historic core	The presence of the CBC creates a physical barrier between this sector and the historic core, obstructing any visual connection from the sector to the landmark features in the city centre.	
3.Short and/or characteristic approaches to the historic core from the edge of the city	The rail approach to Cambridge from the south is mainly green and rural in character, as the railway line passes along the western boundary of this sector. In addition, the south eastern approach to Cambridge along Babraham Road, on the eastern boundary of the sector, is a historic route that passes over the Gog Magog Hills. The first view of the city on this approach is an elevated panoramic view from the top of the hill near the Haverhill Road junction, south east of this sector. The urban gateway is marked by suburban housing and CBC at the northern corner of the sector.	
4.A city of human scale easily crossed by foot and by bicycle	This quality has already been eroded to a certain extent to the south east of Cambridge, due to the extent of suburban development already present and the ongoing expansion of the CBC. Consequently, the compactness of the city has been reduced and this sector is relatively far from the historic core for people to walk or cycle into the centre. However, well used cycle and pedestrian routes are apparent including the Sustrans route along the railway to the west and a cycle lane along Babraham Road/Hills Road to the east.	
5. Topography providing a framework to Cambridge	The chalk hills of the Gog Magog Hills are a key element of the topographic bowl in which Cambridge is located, providing physical and visual containment to the south east of the city. They provide a marked contrast to the lower lying ground on which Cambridge is located and the Fen landscape to the north and east of the city, physically manifesting the underlying geology. These are the closest areas of high ground to the edge of Cambridge, with the high point of Wandlebury located to the south east of this sector.	
	The northern and eastern parts of this sub area are relatively flat and part of the bowl landform in which Cambridge is located. The	White Hill is itself a prominent area of landform in relatively close proximity to the edge of Cambridge, forming the north

Qualities Relevant to Green Belt Openness and Purposes	Sub Area I.B – north of Granham’s Road	Sub Area I.C – White Hill
	central, western and southern parts are on the Gog Magog foothills.	westernmost extent of the Gog Magog foothills.
6. Long distance footpaths and bridleways providing access to the countryside	The route of Sustrans National Cycle Route 11 follows the eastern edge of the railway line along the western edge of the sector, before turning along the northern boundary of the sector. This provides a well-used cycle link between the centre of Cambridge and Great Shelford. Public access into the remainder of the sector is relatively limited, with the exception of a public footpath leading from Granham’s Road to Nine Wells Local Nature Reserve.	
7. Key views of Cambridge from the surrounding landscape	There are no defined key views within this sector, but the sector is visible in key views from Magog Down and Babraham Road close to Wandlebury Country Park, as well as other viewpoints on roads on higher ground to the south of the sector. Views of the large buildings at CBC (which are recognisable landmarks) are possible from much of this sector, in the context of the ongoing development on the campus, and obstruct views to the historic city centre landmarks to the north.	
8. Significant areas of Distinctive and Supportive townscape and landscape	All of this sector is identified as Supportive landscape. Much of it lies on the lower foothills of the Gog Magog Hills, which are an important feature of the setting of Cambridge in their own right and also form the backdrop in views out of and across the city. The Gog Magog Hills are the major component of the sense of place associated with the areas south east of Cambridge, influencing the perception of the city from this direction. White Hill in sub area I.C is a particularly noticeable expression of this landform. The flatter land in the northern and eastern parts of this sector forms part of the rural foreground to the city as seen in elevated views from the south east.	
9. A soft green edge to the city	In much of this sector, the city is lacking a green edge where new developments are occurring around CBC. New housing development at the Bell School site off Babraham Road, as well as the expansion of CBC, are very visible and present a hard urban edge at present. A softer green edge will become apparent as new planting associated with the developments matures.	

Qualities Relevant to Green Belt Openness and Purposes	Sub Area I.B – north of Granham’s Road	Sub Area I.C – White Hill
10. Good urban structure with well-designed edges to the city	The masterplans for the developments at CBC and the Bell School site indicate that the developments have been designed to create long-term edges to the city.	
11. Green corridors into the city	This sector is adjacent to the green corridor along Hobson’s Brook west of the railway. It is separated from the green corridor by the railway line, with limited connections across the railway into the green corridor.	
12. The distribution, physical and visual separation of the necklace villages	Development at CBC is currently extending the edge of Cambridge further southwards. The open countryside of this sector, and particularly the landform and vegetation of White Hill, are key in maintaining separation between Cambridge and Great Shelford. Despite the existing ribbon development along the A1301 Cambridge/Shelford Road to the west, there is still a sense of separation between Great Shelford and Cambridge that is important to retain.	
13. The scale, character, identity and rural setting of the necklace villages	The western part of this sector (sub area I.C and the part of sub area I.B lying west of I.C) forms part of the rural setting of Great Shelford.	
14. Designated sites and areas enriching the setting of Cambridge	This sector includes Nine Wells Local Nature Reserve in the north west. In addition to its ecological importance, it has important heritage associations as the historic source of clean water for the city. A hedgerow west of the A1307 Babraham Road, on the northern boundary, is designated as a City Wildlife Site.	
15. Elements and features contributing positively to the character and structure of the landscape	The small number of mature hedgerows and the treed approach into Cambridge along the A1307 Babraham Road are important features in this sub area. Small woodland blocks, including the Nine Wells Local Nature Reserve, also enhance the setting of Cambridge. The lack of a strong landscape structure increases the risk of urban sprawl if	The distinctive landform of White Hill forms a key element in the setting of Cambridge in this vicinity. The wooded hilltop makes it particularly distinctive.

Qualities Relevant to Green Belt Openness and Purposes	Sub Area I.B – north of Granham's Road	Sub Area I.C – White Hill
	development is extended into the sector in the future.	
16. A city set in a landscape which retains a strongly rural character	This sector retains a rural character to the south, becoming more urbanised to the north as a result of the new development that is occurring, which creates a sense of encroachment into the countryside. The effect of the ongoing CBC and Babraham Road developments should reduce once development is completed and the surrounding planting begins to mature.	

8.3. Key Considerations Relevant to Green Belt Openness

- 8.3.1. The variation in landform and relative lack of vegetation within much of sector I are key considerations in relation to openness within this sector, with the elevated landform of White Hill being part of the foothills of the Gog Magog Hills but also being more vegetated than the rest of the sector. The relative lack of a green urban edge allows views out from the southern edge of Cambridge, both at CBC and adjacent residential developments, into sector I. The sector retains a rural character in the south but is more urbanised in the north adjacent to the existing urban edge. There is limited built development within sector I, which consists predominantly of open farmland with the White Hill Farm complex located within sub area I.C and occasional individual properties along the A1307.

8.4. Key Considerations Relevant to Green Belt Purposes

- 8.4.1. This sector plays an important role in the setting of the south of Cambridge, located immediately adjacent to the existing urban edge and adjacent to the key green approach to the city from the south along the railway line. It forms an area of Supportive landscape. The sector is visible from the approaches to Cambridge along the railway and along the A1307. It also forms the separation between the edge of Cambridge and the foothills of the Gog Magog Hills, with White Hill forming the most north westerly part of the foothills.
- 8.4.2. The sector also forms part of the rural setting to Great Shelford, preventing sprawl of Cambridge further south and further coalescence to the north east of the village. It forms part of the lower lying context to the village, before the landform rises up to the chalk hills. Access is limited through much of the sector, although the Sustrans cycle route through the west of sub area I.B is a key cycle route out of Cambridge and the public footpath to Nine Wells is well used. Development within the sector is restricted to isolated properties on White Hill and along the A1307.

8.5. Proposed Route within the Sector

- 8.5.1. The proposed guided busway route would enter the sector in the north west of sub area I.B, at the base of the embankment of the existing Addenbrooke's Road bridge, requiring

relatively limited vegetation removal. It would curve around the base of the embankment to run along the eastern edge of the railway line, requiring part of the existing cycleway to be realigned and a short section of hedgerow to be removed. A culvert and separate bridge structure would be required over a ditch at the base of the embankment. It would remain entirely within sub area I.B, running close to the south western side of the hedgerow along the boundary of sub areas I.B and I.C, and join Granham's Road close to the access to White Hill Farm, requiring a short section of hedgerow to be removed. A length of Granham's Road and the guided busway would be lit at the crossing point. The route would include a new busway approximately 7.3m wide with grass verges to either side. A branch would be created off the existing cycleway at the point where the guided busway route begins to turn away from the cycleway and railway line, creating a new 3m wide shared use route south of the guided busway route. Where the route crosses Hobson's Brook a new bridge structure would be required. it would have a deck width of approximately 13.9m and have a clearance of a minimum of 2.4m above the existing ground level, with earth embankments approaching the bridge.

- 8.5.2. The proposals include a hedgerow with trees along the east side of the guided busway route, wildflower meadow planting, an attenuation pond and ecology ponds near Nine Wells and the Addenbrooke's Road bridge.

8.6. Preservation of Green Belt Openness

- 8.6.1. The stretch of the proposed route that runs through CBC, along with any associated stops, would be located outside of the Green Belt and would therefore preserve the openness of the Green Belt.
- 8.6.2. The proposed route would predominantly cross undeveloped countryside from the point that it exits CBC. Given that this area is relatively flat, there would be minimal requirement for cut and fill operations, aside from the culvert/bridge on the Green Belt boundary and the bridge over Hobson's Brook, meaning that there would be no significant volume of development to reduce the openness of the Green Belt. The route would be constructed almost at grade beyond the earth embankment to the Hobson's Brook bridge, minimising the visual effect of the proposals. The introduction of signage, traffic signals, lighting and road markings at the proposed Granham's Road junction is not considered to affect openness. This is considered to preserve the openness of the Green Belt in sub area I.B.
- 8.6.3. The design for the bridge and culvert over the ditch on the Green Belt boundary and the bridge over Hobson's Brook would introduce built structures into the Green Belt, and as indicated above the designs indicate that these would have a minimum of 2.4m clearance above the existing ground level and have ramped approaches. This would introduce a volume of new development within sub area I.B. Whilst this volume of development is likely to be relatively small, there would be some visibility of the structures from the surrounding area, in the context of the adjacent railway line and Addenbrooke's Road bridge. It is considered that there would be a reduction in the openness of the Green Belt within sub area I.B due to the creation of the structures.

8.7. Potential for Conflict with Green Belt Purposes

- 8.7.1. As mentioned above, the stretch of the proposed route that passes through CBC would be outside the Green Belt and there would be no conflict with Green Belt purposes.
- 8.7.2. The proposed route would extend development into undeveloped countryside but would broadly follow the existing corridor created by the railway line and adjacent existing cycleway. The route would run along the lower lying landform but would not be located directly between the southern edge of Cambridge and White Hill as a foothill of the Gog Magog Hills. The location on the lower lying ground would minimise visibility of the proposals from the edge of Cambridge, with the exception of the proposed bridge and culvert on the Green Belt boundary and the bridge over Hobson's Brook. In this sector, the route option would be far enough from the edge of Great Shelford to avoid any impacts on the setting of the village and to prevent settlements merging with each other. Whilst the proposed route would pass through an area of Supportive landscape, it would continue to perform its role as Supportive landscape with the route through it and there is therefore no conflict with Green Belt purposes as a result of this route option.

8.8. Reduction in Openness or Degree of Green Belt Conflict

- 8.8.1. The proposed bridge and culvert on the Green Belt boundary and the proposed bridge over Hobson's Brook as part of the proposed route would introduce a volume of new development that would reduce openness.
- 8.8.2. The proposed route would avoid conflict with Green Belt purposes.
- 8.8.3. The anticipated degree of harm as a result of a permanent reduction in openness of the nature described above would be as follows:
- The proposed bridge and culvert on the Green Belt boundary and the proposed bridge over Hobson's Brook and any associated ramped approaches as part of the proposed route would introduce a volume of additional built development into open countryside. This would potentially reduce openness and is considered to result in a Minor degree of harm to Green Belt arising from the reduction in openness.

9.0 Assessment of Sector II: East of Great Shelford and Stapleford

9.1. Description of Sector

- 9.1.1. Sector II is located to the east of Great Shelford and Stapleford (see Figure 13). The northern boundary follows the boundary of Sector I along Granham's Road and the hedgerow east of Clarke's Hill. The north eastern boundary follows the edges of woodland on the higher ground of Clarke's Hill, Fox Hill and Magog Down, which form part of the foothills of the Gog Magog Hills, with the eastern boundary following a tree belt and mature hedgerow that coincides with the Babraham parish boundary. The southern boundary follows the River Granta and its associated riparian vegetation. The western boundary follows the Green Belt boundary along the edge of Stapleford and Great Shelford, with a short section of the boundary in the north west corner following a tree belt along the boundary of a smaller scale landscape associated with Granham's Farm.
- 9.1.2. The sector forms the separation between Great Shelford, Stapleford and the foothills of the Gog Magog Hills. Land use in most of the sector is large scale arable farmland (see Photographs 5-7 and 9-10 at Figures 17-20). However, there are some smaller scale areas immediately adjacent to the villages (see Photograph 8 at Figure 18). The larger arable fields are undulating and contain limited hedgerows. There are almost no public rights of way through this sector, with the exception of a bridleway close to the southern boundary. The River Granta is a County Wildlife Site
- 9.1.3. Three sub areas have been identified within this sector. The most northerly (II.A) falls between Granham's Road and Hinton Way. The second (II.B) is located between Hinton Way and Haverhill Road; a retirement village is currently under construction, adjoining the existing settlement edge within sub area II.B. The final (II.C) is between Haverhill Road and the River Granta. The proposed route passes through all three sub areas and they are therefore all assessed below.

9.2. Baseline Assessment

- 9.2.1. Figure 13 illustrates the key considerations relevant to both openness and Green Belt purposes in sector II.

Qualities Relevant to Green Belt Openness and Purposes	Sub area II.A – north west of Clarke's Hill	Sub area II.B – south west of Fox Hill	Sub area II.C – north of River Granta
5. Topography providing a framework to Cambridge	This sector forms the lower landform immediately adjacent to the edge of both Great Shelford and Stapleford. It then begins to rise up the slopes of the group of hills forming the foothills of the Gog Magog Hills; Clarke's Hill, Fox Hill and Magog Down. The chalk hills of the Gog Magog Hills are a key element of the topographic bowl in which Cambridge is located, providing physical and visual containment to the south east of the city. They provide a marked contrast to the lower lying ground on which Cambridge is located,		

Qualities Relevant to Green Belt Openness and Purposes	Sub area II.A – north west of Clarke's Hill	Sub area II.B – south west of Fox Hill	Sub area II.C – north of River Granta
	physically manifesting the underlying geology. These are the closest areas of high ground to the edge of Cambridge. The proposed country park associated with the proposed retirement village (which is only to be formed following the making of the TWA Order and acquisition or vesting of land required for the Project) would be located on the slopes of the group of hills forming the foothills of the Gog Magog Hills, with the proposed built form (which is currently under construction) located on the lower landform adjacent to the existing village, retaining the topographic framework to Great Shelford and Stapleford.		
6. Long distance footpaths and bridleways providing access to the countryside	There are no public rights of way, cycleways or long distance routes through these sub areas.		There is a single bridleway in the south of this sub area, running from the edge of Stapleford towards Babraham.
7. Key views of Cambridge from the surrounding landscape	There are no key views in or through this sector. Vegetation along the tops of the hills forming the foothills of the Gog Magogs would largely prevent visibility from key locations to the east.		
8. Significant areas of Distinctive and Supportive townscape and landscape	The northern edge of this sub area is within an area of Supportive landscape associated with the setting of the southern edge of Cambridge. The remainder of the sub area is within the outer rural area of the Green Belt.	These sub areas fall within the outer rural area of the Green Belt.	

Qualities Relevant to Green Belt Openness and Purposes	Sub area II.A – north west of Clarke’s Hill	Sub area II.B – south west of Fox Hill	Sub area II.C – north of River Granta
12. The distribution, physical and visual separation of the necklace villages	Great Shelford and Stapleford form part of the necklace of villages surrounding Cambridge. This sector immediately adjoins both settlements.		
	The open countryside of this sub area, and the landform and vegetation of Clarke’s Hill, form part of the remaining separation between Cambridge and Great Shelford. Despite the existing ribbon development along the A1301 Cambridge/ Shelford Road to the west, there is still a sense of separation between Great Shelford and Cambridge that is important to retain.	Although the villages have largely coalesced, the open countryside of this sub area forms part of the remaining separation between Great Shelford and Stapleford. The retirement village development is extending Stapleford north eastwards along Haverhill Road into the Green Belt.	This sub area does not form part of the separation between Great Shelford, Stapleford and Cambridge. It does however, form part of the separation between Stapleford and Sawston to the south, which is reinforced by the presence of the River Granta.
13. The scale, character, identity and rural setting of the necklace villages	This sector immediately adjoins both Great Shelford and Stapleford. It contributes the lower lying landform adjacent to the villages before the landform rises up to the foothills of the Gog Magogs. The relationship between the villages and this low lying landscape setting is a key part of their identity, which has been lost in areas to the north west of the villages and where the villages have coalesced. The extent of rural land between the edge of Stapleford and the foothills of the Gog Magogs is being reduced by construction of the retirement village, which will have some effect on the identity of the village.		

Qualities Relevant to Green Belt Openness and Purposes	Sub area II.A – north west of Clarke’s Hill	Sub area II.B – south west of Fox Hill	Sub area II.C – north of River Granta
14. Designated sites and areas enriching the setting of Cambridge	There are no environmental or cultural designations within these sub areas.		The River Granta along the southern boundary of the sub areas is a County Wildlife Site.
15. Elements and features contributing positively to the character and structure of the landscape	There are relatively few hedgerows through the sector. Those that do occur are often low, clipped features, running perpendicular to the pattern of roads through the sector. Containment is provided by the woodland and tree belts along the higher ground of the Gog Magog foothills and on some boundaries of the villages.		
		The proposed country park will create a positive feature, contributing to the character of sub area II.B and the structure of the landscape.	The River Granta has a noticeable character of its own, with riparian vegetation located along it.
16. A city set in a landscape which retains a strongly rural character	This sector retains a rural character, with only occasional glimpses of any features identifying the close proximity of Cambridge to the north of the sector. Great Shelford and Stapleford have grown east from their historic centres but do not detract from the rural character of the sector. However, the retirement village will further extend Stapleford north eastwards along Haverhill Road into the Green Belt and detract from the rural character of sub area II.B.		

9.3. Key Considerations Relevant to Green Belt Openness

- 9.3.1. The sloping landform and relative lack of vegetation within much of sector II are key considerations in relation to openness within this sector. It has a rural character, despite the presence of Great Shelford and Stapleford to the west. There is limited built development outside the villages within sector II, which consists predominantly of open farmland. However, the consented retirement village will form a future baseline that extends Stapleford north eastwards along Haverhill Road into the Green Belt, reducing

openness in a localised area of the Green Belt. Both the villages and the foothills of the Gog Magog Hills, in locations where access is possible, have views across this sector.

9.4. Key Considerations Relevant to Green Belt Purposes

- 9.4.1. This sector plays a limited role in the wider setting of the south of Cambridge, given its physical separation from the city, which is also visual separation in most cases, although the northern edge of sub area II.A is recognised as part of the Supportive landscape south of Cambridge. The contrast in character between the largely open lower lying landscape within the sector and the elevated and wooded landscape of the foothills of the Gog Magogs is an important feature of the setting of Great Shelford and Stapleford throughout this sector. Development within the sector, outside of the villages, is very limited, retaining a rural character throughout the majority of the sector. The River Granta and its valley form a key characteristic in the south of the sector. The ongoing retirement village development is reducing the contrast between the lower lying landscape north east of Stapleford and the elevated and wooded landscape of the foothills of the Gog Magogs in the setting of Stapleford. It is also reducing the rural character of sub area II.B.

9.5. Proposed Route within the Sector

- 9.5.1. The proposed route would enter sub area II.A on the western side of White Hill. Vegetation removal along the hedgerow between Great Shelford and Clarke's Hill would be required, as well as the hedgerow along the northern side of Hilton Way. The new 3m wide shared use route would be located south of the guided busway. The proposals include woodland planting between the route and existing woodland on Clarke's Hill, as well as hedgerows along both sides of the proposed route in all locations along this stretch where woodland planting is not proposed.
- 9.5.2. South of Hinton Way, the proposed route would continue up the slope of Magog Down, before curving round the east of Great Shelford and Stapleford to join Haverhill Road. This would require removal of a stretch of hedgerow on the southern side of Hinton Way. The alignment remains east of a low hedgerow between Great Shelford and Stapleford, with the route avoiding the retirement village development currently under construction. A further stop is proposed south of Haverhill Road and west of the route, to serve Stapleford. Hedgerow removal would be required on the north side of Haverhill Road only. From Haverhill Road the route would descend down to the River Granta, requiring potential removal of a stretch of hedgerow east of Stapleford. The proposals indicate intermittent tree planting along both sides of the proposed route, with hedgerow planting where the route is closest to being at grade and proposed water meadow enhancements (ponds and ecological ditches) and woodland planting close to the river. The proposals indicate that the bridge structure of the River Granta would have a deck width of approximately 14.4m, with a maximum span of 118m to avoid embankments within Flood Zone 3, and a deck height of approximately 5m above the existing ground level, with earth embankments approaching the bridge. A culvert over an existing stream would be incorporated into the earth embankments.

9.6. Preservation of Green Belt Openness

- 9.6.1. The proposed route would cross undeveloped countryside through sub area II.A. This area is relatively flat, but there would be a requirement for some cut and fill operations. This would not be a significant volume of development that would affect the openness of the Green Belt. The guided busway route would be constructed largely at grade, although becoming more in cutting to the east, minimising the visual effect of the proposals. This is also considered to preserve the openness of the Green Belt in sub area II.A.
- 9.6.2. The proposed route through sub area II.B would continue to cross undeveloped countryside. However, the edge of Stapleford is currently being extended close to the edge of the proposed route as a result of the consented retirement village. The route would be generally relatively flat, but require varying levels of cut and fill. However, there would be no significant volume of development to affect the openness of the Green Belt. The guided busway route would minimise the visual effect of the proposals. This is considered to preserve the openness of the Green Belt in sub area II.B.
- 9.6.3. The openness of the Green Belt in sub area II.C as a result of the proposed route would also continue to be preserved, as the guided busway route would be constructed largely at grade, with the exception of the bridge embankment referenced below, minimising the visual effect of the proposals.
- 9.6.4. The proposed stops would require a small amount of built development within the Green Belt at two separate locations within the sector. Although the locations of the stops are relatively flat, there will be a requirement for cut and fill operations to ensure level parking and turning areas, which will result in a volume of development within the Green Belt. The proposals indicate relatively limited cut and fill at either of the proposed stops. There would also be a requirement for bus shelters and covered cycle parking at the stops, which would add built development within the Green Belt. In addition, the stops would introduce additional hard surfacing, on which there would be small numbers of vehicle movements and parked vehicles throughout the day, and the requirement for lighting, which would be visible infrastructure during the day and new lit areas at night. The introduction of increased signage, lighting and road markings near the proposed road junctions at accesses into the stops are not considered to reduce openness. Visibility of the proposed stops would be reduced over time by the proposed planting within and around them, but visibility would remain in the short to medium term or longer in locations where planting is not possible and the spatial aspect of loss of openness resulting from the volume of proposed development would not be reduced. Consequently, there would be a reduction in openness of the Green Belt within both sub areas II.B and II.C.
- 9.6.5. The design of the bridge over the River Granta indicates that there is likely to be a requirement to remove some vegetation along the river. The bridge would introduce a built structure into the Green Belt, with the span approximately 118m and an assumed retained deck height of approximately 5m. The ramped approach would introduce a volume of new development within sub area II.C. This volume of development is considered to be substantial, but would have limited visibility from the surrounding area due to the

vegetated character of the sub area. It is considered that there would be a reduction in the openness of the Green Belt within sub area II.C due to the creation of the bridge.

9.7. Potential for Conflict with Green Belt Purposes

- 9.7.1. The proposed route through sub area II.A would extend development into undeveloped countryside. The route would run along the lower lying landform but would be located directly between the eastern edge of Great Shelford and Clarke's Hill, which is a foothill of the Gog Magog Hills. The location on the lower lying ground would minimise visibility of the proposals from the edge of Great Shelford. There would be some impact on the setting of the village and the relationship with the foothills of the Gog Magogs. The introduction of development on the slopes of the foothills of the Gog Magog Hills would directly affect the setting of Great Shelford as a necklace village and consequently the wider setting of Cambridge. The proposed route would also pass through an area of Supportive landscape. There would be some conflict with Cambridge Green Belt purpose 2, which also equates to some conflict with National Green Belt purpose 4.
- 9.7.2. The continuation of the proposed route through sub areas II.B and II.C would similarly be located in the lower lying landform between the villages and the foothills of the Gog Magog Hills, although within II.B the route does run up to the 40m contour. Whilst there are no areas of Supportive landscape within these sub areas, the introduction of development on the slopes would directly affect the setting of the two necklace villages and consequently the wider setting of Cambridge. There would be some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4.
- 9.7.3. The proposed stops are intended to be located between the proposed route and the villages, for ease of access by residents. There would be some visibility of the stops from the edge of the villages, although they would be less visible than if they were located higher up the slopes. Again, there would be some conflict with Cambridge Green Belt purpose 2, through impact on the setting of the villages, which also equates to some conflict with National Green Belt purpose 4.
- 9.7.4. The crossing of the River Granta, which would be a bridge, would be physically remote from Great Shelford and Stapleford and would have no impact on the setting of the villages and there would therefore be no conflict with Green Belt purposes within sector II as a result of the bridge and its approach ramps.

9.8. Reduction in Openness or Degree of Green Belt Conflict

- 9.8.1. Whilst the proposed route would preserve the openness of the Green Belt, the proposed stops would introduce a volume of new development, hard paved areas with parked vehicles and lighting with a permanent visual effect on the openness of the Green Belt. The bridge over the River Granta and its associated embankments would also introduce a volume of new development. It is considered that there would be some reduction in openness as a result of the proposed stops and the proposed bridge.
- 9.8.2. It is considered that the proposed route and stops would result in some conflict with Green Belt purposes.

9.8.3. The anticipated degree of harm as a result of reduction in openness and/or conflict with Green Belt purposes of the nature described above would be as follows:

- The proposed route through sub area II.A would result in physical encroachment in views out from Great Shelford, where development is currently limited. This would result in a minor alteration to the setting of the village, resulting in a Minor degree of harm to Green Belt arising from a conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4. There would be some potential to reduce the degree of harm, through appropriate planting along the western side of the route to reinstate a wooded character to views from the village. This degree of harm would also be applicable through sub areas II.B and II.C as a result of the proposed route alignment, although the consented retirement village is also encroaching into the setting of Stapleford.
- The stops proposed along the route would introduce additional built development in close proximity to the edge of the villages. This would reduce openness and affect the setting of the villages, resulting in a Minor degree of harm to Green Belt arising from both the reduction on openness and from the conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4. Planting around the stops would reduce this conflict with purposes over time, although a Minor degree of harm would remain even once new planting is established because of the lighting requirements. The Minor harm to openness would continue on a permanent basis.
- The proposed bridge over the River Granta and associated ramped approaches would introduce a volume of additional built development into open countryside. This would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness.

10.0 Assessment of Sector III: North and East of Sawston

10.1. Description of Sector

- 10.1.1. Sector III is located to the north and east of Sawston, abutting the edge of the village (see Figure 14). The northern boundary follows the boundary of Sector II along the River Granta. The eastern boundary follows the tree belts around Babraham Research Campus and continues along High Street, the road between Babraham and the A505. The southern boundary follows a combination of the woodland belts around the parkland at Sawston Hall and the Green Belt boundary around Sawston. The western boundary follows the A1301.
- 10.1.2. Land use in most of the sector is large scale arable farmland (see Photographs 11-13 at Figures 21-23). However, there are some smaller scale areas immediately adjacent to the village and particularly south of the disused railway line. The area south of the River Granta is also more vegetated and has a slightly different character to some of the larger scale parts of the sector. The larger arable fields are undulating and contain limited hedgerows. There are a number of public rights of way through this sector, particularly in the eastern half between Sawston and Babraham. The River Granta is a County Wildlife Site. There are historic parklands at Sawston Hall and Pampisford Hall, but these are located outside the sector.
- 10.1.3. Three sub areas have been identified within this sector, responding to the field patterns and substantive tree belts or woodland. Of these, the proposed route is unlikely to affect any sub areas other than III.C, with the next-closest sub area III.B physically and visually separated from the proposed route by an existing woodland belt and vegetation along the route of the disused railway line. Only sub area III.C is therefore assessed below.

10.2. Baseline Assessment

- 10.2.1. Figure 14 illustrates the key considerations relevant to both openness and Green Belt purposes in sector III.

Qualities Relevant to Green Belt Openness and Purposes	Sub Area III.C – East of Sawston
5. Topography providing a framework to Cambridge	This sector forms the slightly elevated landform between the River Granta and the River Cam. Whilst river valleys are a feature of the landscape south and east of Cambridge, they do not form a prominent feature in the setting of the city and the sub area is separated from Cambridge by the more prominent topography at the foothills of the Gog Magogs.
6. Long distance footpaths and bridleways providing	There is a limited network of rights of way through this sector, linking Sawston to the west with Babraham and the

Qualities Relevant to Green Belt Openness and Purposes	Sub Area III.C – East of Sawston
access to the countryside	Babraham Research Campus to the east. There are no long distance routes or cycleways through the sector.
12. The distribution, physical and visual separation of the necklace villages	Sawston to the west of the sector is an inset village that is excluded from the Green Belt. The sector forms part of the physical separation between Sawston and Stapleford to the north and Babraham to the east.
13. The scale, character, identity and rural setting of the necklace villages	<p>Whilst Sawston has not historically been considered a necklace village, it is within the rural outer areas of the Green Belt, which contribute to the wider setting of Cambridge. The River Granta and its valley currently create physical separation between Sawston and Stapleford.</p> <p>Recent Green Belt releases have resulted in Sawston expanding further east towards Babraham, reducing the distance between the two villages.</p>
14. Designated sites and areas enriching the setting of Cambridge	The River Granta along the northern boundary of the sector is a County Wildlife Site.
15. Elements and features contributing positively to the character and structure of the landscape	<p>The River Granta has a noticeable character of its own, with riparian vegetation located along it.</p> <p>The route of the disused railway line is a noticeable feature through this sector. It becomes more defined and prominent further south in the sub area.</p>
16. A city set in a landscape which retains a strongly rural character	This sector retains a rural character, being predominantly open arable land. There is no visibility of Cambridge from the sector. However, the edge of Sawston does have an urbanising influence on the rural character of the sub area and will continue to do so as the allocated housing sites are built out.

10.3. Key Considerations Relevant to Green Belt Openness

- 10.3.1. The gently sloping landform and relative lack of vegetation within much of sub area III.C are key considerations in relation to openness within this sector. Whilst Sawston has an increasing influence on the rural character of the sub area, with views into the sub area, there continues to be limited built development outside the villages, and sub area III.C consists predominantly of open farmland. Minor roads through the sub area have open views across it.

10.4. Key Considerations Relevant to Green Belt Purposes

- 10.4.1. This sector plays a limited role in the setting of the south of Cambridge, given its physical and visual separation from the city, although it contributes to the wider rural setting of the city. The open, gently undulating landform is important to the character of the sector, along with its relationship to the River Granta through the sector. The River Granta and its valley form a key characteristic in the north of the sector.
- 10.4.2. The expansion eastwards of Sawston has some localised influence on the rural character of sub area III.C. However, development within the sector, outside of the village, is very limited. The disused railway line is a characteristic of the sector and delineates the edge of Sawston.

10.5. Proposed Route within the Sector

- 10.5.1. The proposed route would enter sub area III.C at the crossing point of the River Granta on the boundary with sub area II.C. As indicated in relation to Sector II, this crossing point would potentially require removal of a stretch of hedgerow east of Stapleford. The proposals indicate that the bridge structure of the River Granta would have a deck width of approximately 14.4m, with a maximum span of 118m to avoid embankments within Flood Zone 3, and a deck height of approximately 5m above the existing ground level, with earth embankments approaching the bridge. A culvert over an existing stream would be incorporated into the earth embankments. The proposals indicate proposed water meadow enhancements (ponds and ecological ditches) and woodland planting close to the river.
- 10.5.2. From the River Granta, the proposed route would cross open fields to run to the east of the disused railway line and the eastern edge of Sawston, crossing Babraham Road on the eastern edge of Sawston and then continuing to follow an alignment parallel to the disused railway line. Some vegetation removal would be required in the area to the north east of the boundary of sub area III.B and at the location where the proposed route would cross a byway running north east from the edge of Sawston. The proposals indicate that the new 3m wide shared use route would be located south of the guided busway. Hedgerow planting is also indicated as part of the proposals, generally along the eastern side of the proposed route, but on both sides of the route in the vicinity of Sawston.
- 10.5.3. South west of Babraham and north west of High Street, approximately at the point where the disused railway line becomes a more substantial tree belt, the proposed route would curve away from the disused railway line to cross High Street approximately 165m north of the disused railway line. This would require the removal of a stretch of hedgerow along High Street. A length of High Street would be lit at the crossing point. The proposals indicate hedgerow planting along the northern side of the proposed route and hedgerow and woodland planting to enhance or fill gaps in the alignment of the disused railway line closer to Sawston.
- 10.5.4. A stop is proposed on the southern side of Babraham Road, west of the route alignment. The proposals indicate tree planting within and around the proposed stop.

10.6. Preservation of Green Belt Openness

- 10.6.1. The landform within much of sector III is gently undulating, although relatively flat to the north east of Sawston. This minimises the requirement for cut and fill operations to construct the proposed route. The proposed route through sub area III.C would cross undeveloped countryside. The guided busway route would be constructed largely at grade, minimising the visual effect of the proposals. This is considered to preserve the openness of the Green Belt in sub area III.C.
- 10.6.2. The proposed stop on the eastern edge of Sawston would require a small amount of built development within the Green Belt. The location of the stop is relatively flat, reducing the likely requirement for cut and fill operations to ensure level parking and turning areas. There would also be a requirement for bus shelters and covered cycle parking at the stop, which would add built development within the Green Belt. In addition, the stop would introduce hard surfacing, on which there would be small numbers of vehicle movements and parked vehicles throughout the day, and the requirement for lighting, which would be visible infrastructure during the day and new lit areas at night. The introduction of increased signage, lighting and road markings near the proposed road junction at the access into the stop is not considered to affect openness. Visibility of the proposed stop would be reduced over time by the proposed planting within and around it, but visibility would remain in the short to medium term and the spatial aspect of loss of openness resulting from the volume of proposed development would not be reduced. Consequently, there would be a reduction in openness of the Green Belt within sub area III.C.
- 10.6.3. The design of the bridge over the River Granta indicates that there will be a requirement to remove some vegetation along the river. The bridge would introduce a built structure into the Green Belt, with a span of approximately 130m and an assumed deck height a minimum of 2.3m above the existing ground level to allow farm access underneath the bridge. The bridge would introduce a volume of new development within sub area III.A. This volume of development is considered to be substantial, but would have limited visibility from the surrounding area due to the vegetated character of the sub area. It is considered that there would be a reduction in the openness of the Green Belt within sub area III.C due to the creation of the bridge.

10.7. Potential for Conflict with Green Belt Purposes

- 10.7.1. The route would run across gently undulating landform and would be located directly adjacent to the edge of Sawston. Whilst the edge of Sawston already reduces the rural character of the landscape east of the village, the route through sub area III.C would extend development into undeveloped countryside. The introduction of development immediately adjacent to the village would directly affect the setting of the village but, given the extensive modern development in the eastern part of Sawston, it would not affect the character of the village and consequently would not affect the wider setting of Cambridge. The proposed route would not affect the separation between Sawston and Stapleford or Babraham. There is therefore no conflict with Green Belt purposes within sector III as a result of the proposed route option.

- 10.7.2. The proposed stop is intended to be located between the proposed route and Sawston, for ease of access by residents. This would increase visibility of the stop from the edge of the village but, again given the extensive and ongoing modern development in the eastern part of Sawston, it would not affect the character of the village and consequently would not affect the wider setting of Cambridge. There is therefore no conflict with Green Belt purposes within sector III as a result of the proposed stop.
- 10.7.3. The bridge crossing of the River Granta would be physically remote from Great Shelford, Stapleford and Sawston, and would have no impact on the setting of the villages or other qualities identified above and there is therefore no conflict with Green Belt purposes within sector III as a result of the bridge and its approach ramps.
- 10.8. Reduction in Openness or Degree of Green Belt Conflict**
- 10.8.1. Whilst the proposed route would preserve the openness of the Green Belt, the proposed stop would introduce a volume of new development, hard paved areas with parked vehicles and lighting with a permanent visual effect on the openness of the Green Belt and the bridge over the River Granta would also introduce a volume of new development. It is considered that there would be some reduction in openness as a result of the proposed stop and the proposed bridge.
- 10.8.2. There would continue to be no conflict with Green Belt purposes as a result of the proposed route, the proposed stop or the bridge over the River Granta.
- 10.8.3. The anticipated degree of harm as a result of some reduction in openness of the nature described above would be as follows:
- The stop proposed adjacent to the edge of Sawston would introduce additional built development in close proximity to the edge of the village. This would reduce openness, resulting in a Minor degree of harm to Green Belt arising from the reduction in openness. Planting around the stop would not change the Minor reduction in openness.
 - The proposed bridge over the River Granta and associated ramped approaches would introduce a volume of additional built development into open countryside. It is considered that this would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness.

11.0 Assessment of Sector IV: South of Babraham

11.1. Description of Sector

- 11.1.1. Sector IV is located to the south of Babraham, between the A11, A505 and A1307 (see Figure 15). The north eastern boundary is formed by the southern extent of the hedgerow and area of woodland along the A1307. The south eastern and southern boundaries are formed by the western and northern edge of the vegetation along the A11 and A505. The western boundary is formed by High Street, the minor road between Babraham and the A505, and the north western boundary is formed by High Street through Babraham and the Green Belt boundary around the southern edge of Babraham.
- 11.1.2. Land use is predominantly arable farmland throughout the sector (see Photograph 13-18 on Figures 23-27). Much of the farmland is large scale, but smaller field parcels are located around Babraham and along the River Granta (see Photograph 16 on Figure 25). This sector includes the River Granta and the disused railway line, both of which are designated as County Wildlife Sites. The sector also abuts Babraham Conservation Area. Rights of way through the area are limited to a single route from Babraham to the A11 (see Photographs 15 and 16 at Figures 24 and 25).
- 11.1.3. Three sub areas have been identified within this sector. Of these, the proposed route and Travel Hub options are unlikely to affect sub area IV.A, given distance from the route and the separation created by the vegetation along the disused railway line. Sub area IV.A is therefore not assessed below.

11.2. Baseline Assessment

- 11.2.1. Figure 15 illustrates the key considerations relevant to both openness and Green Belt purposes in sector IV.

Qualities Relevant to Green Belt Openness and Purposes	Sub Area IV.B – south of River Granta	Sub Area IV.C – north of River Granta
5. Topography providing a framework to Cambridge	This sector is formed of two parts that both slope gently down towards the River Granta through the centre of the sector. Whilst river valleys are a feature of the landscape south and east of Cambridge, they do not form a prominent feature in the setting of the city and the sub area is separated from Cambridge by the more prominent topography at the foothills of the Gog Magogs.	
6. Long distance footpaths and bridleways providing access to the countryside	There is a limited network of rights of way through this sector, restricted to a single route linking Babraham and the Babraham Research Campus in the north to Granta Park to the south. This provides a well-used footpath and cycle link between the key employment areas, although the route across the fields is unpaved and cyclists are required to use	

Qualities Relevant to Green Belt Openness and Purposes	Sub Area IV.B – south of River Granta	Sub Area IV.C – north of River Granta
	the footbridge over the A11. Public access into the remainder of the sector is relatively limited, with no long distance routes or cycleways through the sector.	
12. The distribution, physical and visual separation of the necklace villages	Babraham to the north of the sector is an inset village that is excluded from the Green Belt. The sector forms part of the physical separation between Sawston to the west and Babraham to the north. Although not far apart, there is significant visual separation between the settlements due to topography and tree cover. The sector also contributes to the physical separation between Babraham and Little Abington/Granta Park east of the A11.	
13. The scale, character, identity and rural setting of the necklace villages	Whilst Babraham has not historically been considered a necklace village, it lies within the rural outer areas of the Green Belt, which contribute to the wider setting of Cambridge, and has retained much of its historical integrity. This sector forms the setting to the south of the village, which has little relationship with the landscape to the north due to the physical barrier of walls and tree belts around the Babraham Research Campus. Recent Green Belt releases at Sawston have resulted in it expanding further east towards Babraham, reducing the distance between the two villages.	
14. Designated sites and areas enriching the setting of Cambridge	This sector includes the River Granta, which is designated as a County Wildlife Site.	
	This sub area includes the disused railway line, which is also designated as a County Wildlife Site.	The sub area abuts Babraham Conservation Area.
15. Elements and features contributing positively to the character and structure of the landscape	The River Granta has a noticeable character of its own, with riparian vegetation located along it, located along the boundary between the two sub areas.	
	The route of the disused railway line is a noticeable feature along the boundary of this sub area.	Woodland blocks and the proximity to Babraham contribute positively to the character of the landscape within this sub area. The footbridge over the A11, which allows movement between

Qualities Relevant to Green Belt Openness and Purposes	Sub Area IV.B – south of River Granta	Sub Area IV.C – north of River Granta
		Babraham, Babraham Research Campus and Granta Park, is a prominent feature in the landscape.
16. A city set in a landscape which retains a strongly rural character	This sector retains a rural character, being predominantly open arable land, despite the proximity of the A11. Vegetation along the A11, combined with the landform, reduce visibility of the A11 and traffic along it. There is no visibility of Cambridge from the sector.	

11.3. Key Considerations Relevant to Green Belt Openness

- 11.3.1. Within this sector landform and vegetation combine to create a degree of enclosure. Although fields are often large scale, minor ridgelines to the north east and south west of the River Granta means that in views from the north west the A11 is not visible and conversely that in views from the south east Babraham is often not visible. Strong belts of vegetation along the River Granta and the disused railway line also mean that intervisibility between the three sub areas is limited. There is limited built development within sector IV which consists predominantly of open farmland with the Home Farm complex located within sub area IV.C on the southern edge of Babraham.

11.4. Key Considerations Relevant to Green Belt Purposes

- 11.4.1. This sector plays a limited role in the wider setting of the south of Cambridge, given its physical and visual separation from the city. The gently undulating landform is important to the character of the sector, along with its relationship to the River Granta. The River Granta and its vegetated valley form a key characteristic through the middle of the sector, as does the disused railway line. Small blocks of woodland are also a feature of the sector.
- 11.4.2. Babraham's conservation area and the location of the Babraham Research Campus to the north of it have restricted expansion of the village. It remains a small linear settlement along High Street, although there is some encroachment of built development around Home Farm. Access is very limited within the sector, but the footpath and cycleway south east from Babraham is well used.

11.5. Proposed Route within the Sector

- 11.5.1. The proposed Travel Hub facility would be located in the east of sub area IV.C, on slightly lower ground adjacent to the A11. Vehicular access to the Travel Hub would be via a new junction off the A1307, at the point where existing vegetation around the A3017 and A11 junction stops. Existing vegetation along the River Granta, the A11 and the woodland block between the proposed Travel Hub and Babraham would all be retained, although the hedgerow alongside the public footpath within the Travel Hub site would be removed and

small areas of vegetation removal would be required for the vehicular access into the site. The proposals indicate new planting in the form of tree belts to the east and west of the Travel Hub, linking the existing areas of woodland, with tree planting within the Travel Hub and a hedgerow along the north west edge of the proposed access road.

- 11.5.2. The proposed route would enter Sub Area IV.B from sector III along High Street, approximately 165m north of the disused railway line, and would require the removal of a stretch of hedgerow along High Street. A length of High Street would be lit at the crossing point. It would then run to the north of the high point of the minor ridgeline, crossing the River Granta mid-way along the boundary between sub areas IV.B and IV.C. The crossing of the River Granta would require a bridge structure. The proposals indicate that the bridge structure would have a deck width of approximately 14.4m, with a maximum span of 130m, and a deck height of a minimum of 2.3m above the existing ground level to allow farm access underneath the bridge, with earth embankments approaching the bridge.
- 11.5.3. The route would then curve round to enter the proposed Travel Hub from the west, close to the existing footpath and cycleway link. The route would require the removal of some vegetation along the River Granta at the crossing point. The proposals indicate a proposed hedgerow to the north of the route, with woodland planting in the vicinity of the bridge over the River Granta and species rich grassland in various areas along the route.
- 11.6. **Preservation of Green Belt Openness**
 - 11.6.1. At the proposed Travel Hub, given the undulating landform within sub area IV.C, there will be a requirement for cut and fill operations to ensure acceptable gradients for parking areas, which will result in a volume of development within the Green Belt. The Travel Hub building would add built development within the Green Belt and other structures, such as the solar panels, would add a volume of development. In addition, the parking areas within the Travel Hub would introduce movement and activity into the area, as well as hard surfacing, on which large numbers of vehicles would be parked throughout the day, and the requirement for lighting, which would be visible infrastructure during the day and new lit areas at night. The proposed access road into the Travel Hub would be relatively flat and there would be minimal requirement for cut and fill operations, meaning that there would be no significant volume of development to affect the openness of the Green Belt. The introduction of increased signage, a new roundabout, lighting and road markings at the proposed A1307 junction is not considered to affect openness. The location of the site on lower ground east of the minor ridgeline, together with the existing woodland block, would minimise visibility from the north and west. This visibility would be further reduced over time by planting around the Travel Hub. However, the introduction of the Travel Hub would result in a reduction in openness of the Green Belt within sub area IV.C.
 - 11.6.2. The cut and fill required within sub area IV.B, excluding the bridge embankments referred to below, would be relatively modest and balanced through careful design. The alignment of the route would be visible from the north and west. This visibility could be reduced over time by appropriate planting. The introduction of signage, traffic signals (if required), lighting and road markings at the proposed High Street junction is not considered to affect

openness. Consequently, the openness of the Green Belt within sub area IV.B will be preserved by this route option.

- 11.6.3. The proposed bridge over the River Granta will require the removal of some vegetation along the river and would introduce a built structure and approach ramps into the Green Belt. The presence of the structure would introduce a volume of new development within sub areas IV.B and IV.C. It is considered that this volume of development would be substantial but would have limited visibility from the surrounding area due to the vegetated character of the sub area. It is considered that there would be a reduction in the openness of the Green Belt within sub areas IV.B and IV.C due to the creation of the bridge.

11.7. Potential for Conflict with Green Belt Purposes

- 11.7.1. The proposed Travel Hub would be located in undeveloped countryside within sub area IV.C. This would introduce development into an area where very little development is currently visible. The location of the proposed Travel Hub set down in the landscape between the localised ridgeline and the A11 would reduce visibility of the proposals from the north and west, and visual containment is provided to the south and east by existing vegetation along the A11 and A1307. The scale of the overall proposed Travel Hub, particularly the amount of hardstanding and other associated infrastructure, would be in conflict with National Green Belt purpose 3, which is consequently conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4 in that it would affect the strongly rural character of the landscape around Cambridge. However, the proposed Travel Hub would be located far enough east from the edge of Babraham and of Sawston to avoid changes to the character of the setting of either village and consequently the setting of Cambridge, which equates to no conflict with Cambridge Green Belt purpose 2 or National Green Belt purpose 4 in this regard. The location of the proposed Travel Hub is also far enough from existing settlements to prevent settlements merging into one another, avoiding conflict with Cambridge Green Belt purpose 3 and National Green Belt purpose 2.
- 11.7.2. The proposed route would also extend development into undeveloped countryside. The route would travel across the undulating landform of the minor ridgeline south west of the River Granta, on the northern side of the ridgeline. Both of these factors would increase the visibility of the proposed route from the north and west. The proposed route within this sector is separated from the edge of both Babraham and Sawston, which would avoid any impacts on the setting of the village and prevent settlements merging with each other. The bridge crossing of the River Granta would be physically remote from Babraham and would have no impact on the setting of the village, despite the changes associated with the potential increase in the length of the bridge embankment, and there is therefore no conflict with Green Belt purposes within sector IV as a result of the proposed route.

11.8. Reduction in Openness or Degree of Green Belt Conflict

- 11.8.1. The proposed Travel Hub would introduce a volume of new development, hard paved areas with parked vehicles and lighting with a permanent visual reduction in the openness of the Green Belt. The bridge over the River Granta would also introduce a volume of new

development. It is considered that there would be some reduction in openness as a result of this proposed bridge.

- 11.8.2. The proposed Travel Hub would have some conflict with Green Belt purposes. The proposed route and bridge would avoid conflict with Green Belt purposes.
- 11.8.3. The anticipated degree of harm as a result of some reduction in openness and/or conflict with Green Belt purposes of the nature described above would be as follows:
 - The proposed Travel Hub would introduce development into a currently undeveloped area. The location of the proposed Travel Hub would reduce visibility of the proposals from the north and west, as it would be set down in the landscape between the localised ridgeline and the A11. It is considered that this would result in a moderate-minor degree of encroachment into undeveloped countryside. Overall, there would be partial changes to relevant aspects of the landscape, resulting in a Moderate degree of harm to Green Belt arising from both the reduction in openness and a potential conflict with National Green Belt purpose 3, Cambridge Green Belt purpose 2 and National Green Belt purpose 4. Planting along the north western boundary of the proposed Travel Hub could reduce this conflict over time to a Moderate-minor degree of conflict with Green Belt purposes. The reduction in openness would remain unchanged.
 - The proposed bridge over the River Granta and any associated ramped approaches would introduce a volume of additional built development into open countryside. This would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness.

12.0 Conclusions

- 12.1.1. The proposed route for the proposed guided busway would preserve the openness of the Green Belt. However, the various proposed stops, the Travel Hub and bridges along the route would reduce the openness of the Green Belt and therefore fail to preserve openness.
- 12.1.2. The proposed route would have some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4 between Granham's Road and the River Granta.
- 12.1.3. The stops proposed at Great Shelford and Stapleford along the proposed route would have some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4.
- 12.1.4. Consequently, the Project as a whole is considered to result in harm to the Green Belt. The anticipated degree of harm for the proposed route, as a result of some reduction in openness and/or conflict with Green Belt purposes of the nature described above, would be as follows:
 - For the proposed route between Granham's Road and the River Granta there would be a Minor degree of harm to Green Belt arising from some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4, as a result of physical encroachment in views out from Great Shelford and Stapleford, in the lower lying land between the villages and the slopes of Clarke's Hill and Magog Down as the foothills of the Gog Magog Hills, where development is currently limited.
 - The stops proposed along the route at Great Shelford and Stapleford would introduce additional built development in close proximity to the edge of the villages. The stops would reduce openness and affect the setting of the villages, resulting in a Minor degree of harm to Green Belt arising from both the reduction in openness and some conflict with Cambridge Green Belt purpose 2 and National Green Belt purpose 4. Planting around the stops would reduce this conflict over time, although a Minor degree of harm would remain even once new planting is established, and the Minor reduction in openness would continue.
 - The stop proposed adjacent to the edge of Sawston would result in a reduction in openness resulting in a Minor degree of harm to Green Belt arising from the reduction in openness. Planting around the stop could reduce this conflict with purposes over time, although a Minor degree of harm would remain even once new planting is established, and the Minor reduction in openness would continue.
 - The proposed bridge over Hobson's Brook and the associated ramped approaches would introduce a volume of additional built development into open countryside. This would reduce openness and result in a Minor degree of harm to Green Belt arising from the reduction in openness.
 - The proposed bridge over the River Granta between Stapleford and Sawston, and the associated ramped approaches, would introduce a volume of additional built development into open countryside. This would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness.
 - The proposed route would also include the requirement for a second bridge over the River Granta near Babraham and associated ramped approaches, which would

introduce a volume of additional built development into open countryside. This would reduce openness and result in a Moderate-minor degree of harm to Green Belt arising from the reduction in openness.

- 12.1.5. The proposed building, solar panels and other structures at the Travel Hub site would introduce a volume of new development with a permanent visual and spatial effect on the openness of the Green Belt. In addition, the parking areas within the Travel Hub would introduce hard surfacing, on which large numbers of vehicles would be parked throughout the day, and the requirement for lighting, which would be visible infrastructure during the day and new lit areas at night. There would be some conflict with National Green Belt purpose 3, Cambridge Green Belt purpose 2 and National Green Belt purpose 4. However, the proposed Travel Hub fits relatively well in its landscape context, being close to the A11 and at a low elevation.
- 12.1.6. The anticipated degree of harm for the proposed Travel Hub as a result of some reduction in openness and conflict with Green Belt purposes of the nature described above, would be as follows:
 - The proposed Travel Hub would introduce development into a currently undeveloped area. The location of the proposed Travel Hub would reduce visibility of the proposals from the north and west, as it would be set down in the landscape between the localised ridgeline and the A11. This would result in a degree of encroachment into undeveloped countryside. Overall, there would be partial changes to relevant aspects of the landscape, resulting in a Moderate degree of harm to Green Belt arising from both the reduction in openness and some conflict with National Green Belt purpose 3, Cambridge Green Belt purpose 2 and National Green Belt purpose 4. Planting along the northern boundary of the proposed Travel Hub would reduce this conflict over time to a Moderate-minor degree of harm to Green Belt purposes.
- 12.1.7. The outcomes of the assessment of the Project are summarised in the table on the following pages.

	Preservation of Openness	Conflict with Purposes	Degree of Harm
Sector I			
Route between CBC and Great Shelford (within sub area I.B)	Yes	No	N/A
Proposed bridge and culvert on the Green Belt boundary and proposed bridge over Hobson's Brook (within sub area I.B)	No	No	Minor
Sector II			
Route between CBC and Great Shelford (within sub area II.A)	Yes	Yes	Minor
Route between Great Shelford and River Granta (within sub area II.B and II.C)	Yes	Yes	Minor
Proposed stops	No	Yes	Minor
Proposed bridge over River Granta	No	No	Moderate-minor
Sector III			
Proposed route (within sub area III.C)	Yes	No	N/A
Proposed stop (within sub area III.C)	No	No	Minor
Proposed bridge over River Granta (within sub area III.C)	No	No	Moderate-minor
Sector IV			
Proposed Travel Hub (within sub area IV.C)	No	Yes	Moderate, reducing to Moderate-minor with planting

	Preservation of Openness	Conflict with Purposes	Degree of Harm
Proposed Route (within sub areas IV.B and IV.C)	Yes	No	N/A
Proposed bridge over River Granta (within sub areas IV.B and IV.C)	No	No	Moderate-minor