

The Network Rail (Cambridge South Infrastructure Enhancements) Order  
Public Open Space Assessment



# Public Open Space Assessment

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## PUBLIC OPEN SPACE ASSESSMENT

### Summary of principal findings

This document presents the assessment of public open space (POS) associated with the construction and operation of the Cambridge South Infrastructure Enhancements scheme (the “proposed Development”). Network Rail are submitting a Transport and Works Act Order (“TWAO”) application to secure the necessary powers to construct and operate the proposed Development, including powers to compulsorily acquire land and rights over land both temporarily during construction and permanently.

For the purposes of this assessment public open space is defined as, *“land laid out as a public garden, or used for the purposes of public recreation, or land which is a disused burial ground”*. This is the statutory definition contained in the Acquisition of Land Act 1981. In addition, the National Planning Policy Framework defines open space in ‘Annex 2: Glossary’ as, *“All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity.”* As such for the purpose of this assessment, it does not matter whether the POS has been designated and protected by the local authority within the relevant Local Plan or not.

The baseline review identified two areas of POS within the site boundary that may be impacted during the construction and/or operational phases. The first area is Hobson’s Park (OS1) and the second is the grounds surrounding the Long Road Sixth Form College (OS2).

Temporary significant adverse effects during construction are anticipated on both areas of POS in relation to recreational and visual amenity. However, as these effects are temporary, it is not anticipated that there will be any long-term significant adverse effects as a result of the construction of the proposed Development.

The proposed Development would also result in the permanent loss of circa 20,742m<sup>2</sup> of POS: 20,439m<sup>2</sup> within Hobson’s Park and 303m<sup>2</sup> POS within the grounds of Long Road Sixth Form College. As compensation for this, 20,840m<sup>2</sup> of POS will be provided as exchange land for both sites and there will be no significant long-term residual effects on open space provision. There will therefore be a net gain in POS once the proposed Development becomes operational. The assessment of potential areas of exchange land is contained in Appendix 1.

## 1 Introduction

- 1.1.1 This document presents the assessment of POS effects associated with the construction and operation of the proposed Development.
- 1.1.2 This document is set out as follows:
- Legislative and policy context – relevant national and local policy framework, legal provisions and guidance which have been used to define the assessment approach are outlined;
  - Assessment methodology – the methodology for the assessment, including an explanation of the study area and the approach for determining significance of effects;
  - Baseline – a summary of the POS baseline within the study area is provided;
  - Potential effects – the potential impacts and effects (both beneficial and adverse) during construction and operation are characterised;
  - Mitigation measures – proposed mitigation, compensation and enhancement measures are described; and
  - Residual effects – the significance of residual effects (both beneficial and adverse) following the implementation of mitigation measures are assessed.
- 1.1.3 As POS is to be permanently acquired under the TWAO, Network Rail has included powers under the Acquisition of Land Act 1981 to acquire land that will be used to provide replacement POS. Appendix 1 to this document contains an assessment of the replacement POS.
- 1.1.4 A detailed description of the proposed Development is provided in Chapter 4 (The Site and Proposed Development) in Volume 2 of the Environmental Statement (ES) that accompanies this TWAO.

## 2 Legislative and policy context

- 2.1.1 The following legislation, policies and guidance govern the treatment of POS and have been referred to in preparing this Assessment.

### Acquisition of Land Act 1981

- 2.1.2 Section 19(4) of the Acquisition of Land Act 1981 ("the 1981 Act") (Glossary: Ref. 1) provides the following definition of open space:
- 'land laid out as a public garden, or used for the purposes of public recreation, or land which is a disused burial ground'.*
- 2.1.3 Pursuant to section 19 of the 1981 Act, where a compulsory purchase order (including a TWAO made under the Transport and Works Act 1992) authorises the compulsory acquisition of open space, the order shall be subject to Special Parliamentary Procedure ("SPP") unless the Secretary of State is satisfied, and certifies that, one of the exceptions prescribed by section 19(1) of the 1981 Act applies.
- 2.1.4 These exceptions are:

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- i. *'that exchange land has been provided that is no less in area and is equally advantageous for use to the persons, if any, entitled to rights over such land, and to the public, and that the land given in exchange has been or will be vested subject to the rights attached to the land purchased; or*
- ii. *that the land is being purchased to secure its preservation or improve its management; or*
- iii. *that the land does not exceed 250 square yards (which converts to approximately 209 square metres (m<sup>2</sup>)) in extent or is required for the widening or drainage of an existing highway and that the giving in exchange of other land is unnecessary, whether in the interests of the persons, if any, entitled to rights over such land or in the interests of the public'.*

National Planning Policy Framework (NPPF), Ministry of Housing, Communities and Local Government 2019

- 2.1.5 The National Planning Policy Framework (NPPF) (Section 8: Ref. 2), states that open space should be taken into account in planning for new development and considering proposals that may affect existing open space.
- 2.1.6 Paragraph 96 of the NPPF recognises that, *'access to a network of high-quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities.'*
- 2.1.7 Paragraph 97 of the NPPF seeks to protect existing open space, recreation and leisure-time facilities. It states that, *'existing open space, sports and recreational buildings and land, including playing fields, should not be built on unless:*
  - *an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or*
  - *the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or*
  - *the development is for alternative sports and recreational provision, the needs for which clearly outweigh the loss.'*

National Networks National Policy Statement (NNNPS) Department for Transport December 2014

- 2.1.8 In England, the NNNPS (Section 8: Ref. 3) may be a material consideration in decision making for applications that fall under the Town and Country Planning Act 1990 or any successor legislation. Whilst the Scheme is seeking consent under the Transport and Works Act, given the nature of the Scheme as rail infrastructure it is appropriate that weight should be given to the policies set out in the NNNPS.
- 2.1.9 Paragraph 5.162 of the NNNPS sets out that access to high quality open spaces and the countryside and opportunities for sport and recreation can be a means of providing necessary mitigation and/or compensation requirements.
- 2.1.10 Paragraph 5.180 states that where green infrastructure is affected, applicants should aim to ensure the functionality and connectivity of the green infrastructure network is maintained and any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space, including appropriate access to new coastal access routes, National Trails and other Public Rights of Way (PROW).
- 2.1.11 In terms of replacement land, Paragraph 5.166 states that existing open space, sports and recreational buildings and land should not be developed unless the land is surplus to

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requirements or the loss would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location. It also goes on to say (Paragraph 5.181) that any exchange land should be at least as good in terms of size, usefulness, attractiveness, quality and accessibility.

National Planning Practice Guidance (NPPG) Ministry of Housing, Communities and Local Government, 2014

- 2.1.12 The Guidance explains that open space includes all open space of public value and can take many forms, from formal sports pitches to open areas within a development, linear corridors and country parks. It can provide health and recreation benefits to people living and working nearby; have an ecological value and contribute to as well as being an important part of the landscape and setting of built development, and an important component in the achievement of sustainable development.
- 2.1.13 It sets out that local planning authorities should assess the need for open space and opportunities for new areas of public open space.

Cambridge Local Plan, Cambridge City Council (Adopted 2018)

- 2.1.14 Policy 67 (Protection of open space) seeks to protect open space land. The policy explains that:

*'Development proposals will not be permitted which would harm the character of, or lead to the loss of, open space of environmental and/or recreational importance unless:*

- a) the open space can be satisfactorily replaced in terms of quality, quantity and access with an equal or better standard than that which is proposed to be lost; and*
- b) the re-provision is located within a short walk (400m) of the original site.*

*In the case of school, college and university grounds, development may be permitted where it meets a demonstrable educational need and does not adversely affect playing fields or other formal sports provision on the site. Where replacement open space is to be provided in an alternative location, the replacement site/facility must be fully available for use before the area of open space to be lost can be redeveloped.'*

- 2.1.15 The supporting text to the Policy highlights the importance of open space and the contribution to the character of Cambridge that it brings. Paragraph 7.43 explains that open space is valuable in terms of supporting a range of city-wide strategies, including health and well-being, flood risk mitigation and climate change strategies. Paragraph 7.48 states that, *'replacement sites/facilities should not increase any identified deficiencies in open space in the ward where the original site is located. Consideration should also be given to how they link with the wider ecological network and enhance biodiversity'*.

South Cambridgeshire Local Plan, South Cambridgeshire District Council (Adopted 2018)

- 2.1.16 Policy SC/1 (Allocation for Open Space) identifies sites to meet local need for open space. Site allocation SC/1 (2e) identifies land south of Granhams Road, Great Shelford as a new site for open space. The 4.8 ha area is highlighted as being only suitable for informal recreation uses due to its character and parkland setting.

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- 2.1.17 Whilst the site south of Granhams Road is the closet site allocation for open space provision within the local site, its distance, at over 1km from the affected area of POS at Hobson's Park has discounted it from further consideration as potential replacement land.
- 2.1.18 Policy SC/7 (Outdoor Play Space, Informal Open Space and New Developments) Strategic as minimum standard to ensure provision of open space in new developments.
- 2.1.19 Although Policy SC/7 seeks to secure the provision of open space for residential development and is therefore not relevant to the development of rail infrastructure, the supporting text to the Policy notes that, *'access to good quality open space and children's play facilities has significant benefits for community health and wellbeing'*.

Cambridge City Council - Open Space and Recreation Strategy (Adopted October 2011)

- 2.1.20 The Adopted Strategy provides a reassessment of open spaces within the City, which were considered as a part of the previously Adopted Strategy (2008), along with an evaluation of a range of additional sites, including a new quality assessment of all sites surveyed. The revised Strategy will be a material consideration in decision-making and was used to inform the development of the Local Plan Review.
- 2.1.21 The overall vision of the Strategy is to provide, improve and maintain a framework of diverse and high value open spaces that are accessible to all, physically, culturally and socially, and which reflect and enhance the special character and setting of Cambridge. Where possible, existing open spaces should be linked in a green grid within the City and to the surrounding rural areas.

Recreation and Open Space Study - South Cambridgeshire (July 2013)

- 2.1.22 The 2013 Recreation and Open Space Study provides an update to the Council's 2005 Audit and Assessment of Need for Outdoor Playspace and Informal Open Space in South Cambridgeshire (Recreation Study) and considers the current quantity and quality of provision and how this is meeting local need, utilising the assessments to review the local standard of provision developed from the 2005 Study.
- 2.1.23 In conclusion, Paragraph 7.13 of the Study states:  
*"Surveys indicate that informal open space is an important element of provision, and it should continue to be required to be delivered through new development. This standard includes all kinds of informal open space, from walking areas to meeting places, with varying degrees of formality. These spaces will vary greatly in form and function, and must be selected to suit the type and location of the development."*
- 2.1.24 Paragraph 7.15 goes on to say that:  
*"Normally the informal open space requirement will be provided within the development site, but in some instances the provision may be met by providing additional landscaped footpaths, bridleways and linkages to nearby recreational facilities or areas. The future maintenance, management and ownership of these areas would be agreed by legal agreements during the planning process."*



### 3 Assessment methodology

#### Study Area

- 3.1.1 The study area for assessing the potential direct impacts on POS resulting from the construction and operation of the proposed Development comprises the site boundary, defined by the TWAO as shown in Figure 1 below. Where any area of identified POS extends beyond the site boundary (but is in part within the site boundary) this will be considered within the assessment.

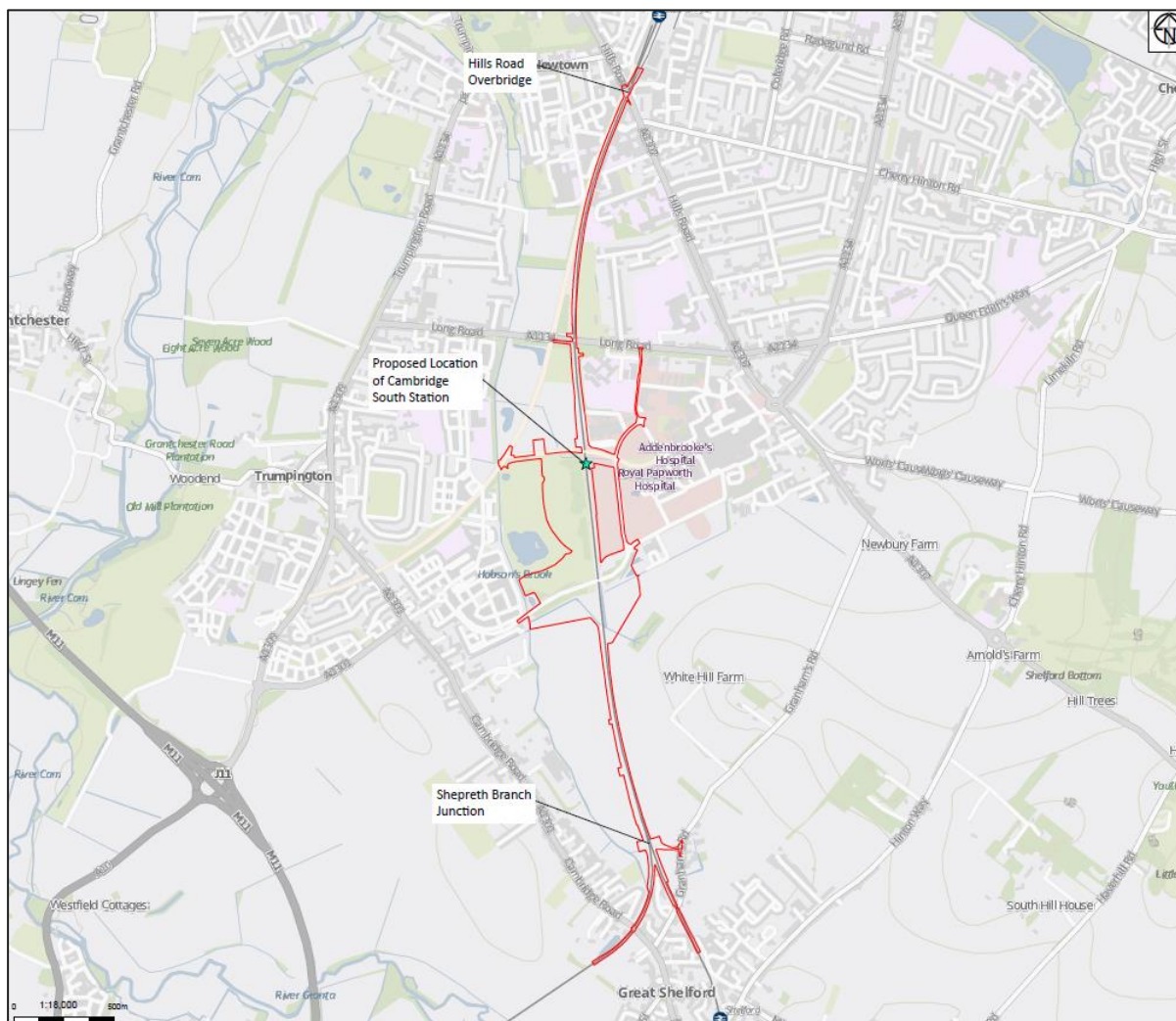


Figure 1 Proposed Site Boundary

#### Approach

- 3.1.2 A review of publicly available information referred to in this document has been undertaken to assess any relevant information in relation to the areas of POS which could potentially be affected by the construction and operation of the proposed Development.
- 3.1.3 The Assessment considers the impacts on areas of identified POS where temporary or permanent land acquisition is required. There are no impacts on other POS as a result of the

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proposed Development that are not being temporarily or permanently acquired within the Order Limits.

3.1.4 This Assessment considers the following aspects:

- Location and type of POS affected by the proposed Development e.g. common land, village greens, open green space, allotments, sports pitches etc.;
- The amount of land which will be acquired or affected by the proposed Development (during both the construction and operational phases);
- The wider benefits of the POS e.g. sport and recreational use, biodiversity value and visual amenity;
- Quality of the land for use as public amenity; and
- Any current accessibility restrictions to the land.

3.1.5 Due to Covid-19 restrictions, no site walkovers have been undertaken as part of this Assessment. However, site walkovers were undertaken during the baseline surveys for the biodiversity and landscape and visual impact assessment topics within the ES and this data has been used to inform the Assessment.

3.1.6 It is not considered that there will be any direct or indirect impacts on POS beyond the site boundary and this has therefore been scoped out of the Assessment (unless, as noted above where the same POS land lies partly within and outside the site boundary).

3.1.7 This document does not assess the impacts of the proposed Development on the PRow network as this is dealt with in Chapter 15 (Population and Human Health) and Chapter 17 (Transport) of the accompanying ES. The Assessment does highlight potential impacts on biodiversity, landscape and visual impact in respect of the POS land only.

3.1.8 There are no direct or indirect impacts on allotment or cemetery sites in terms of their use as POS and therefore this has been scoped out of the Assessment.

3.1.9 The method of assessment and reporting of significant effects will be predominantly qualitative based on the methodology set out in Chapter 2 (EIA methodology) of the accompanying ES. This will involve the following steps:

- Categorisation of importance (sensitivity) of receptor (existing POS).
- Categorisation of magnitude of the impact; and
- Assessment of the significance of the effect based on the importance of the receptor (existing POS) and magnitude of the impact.

3.1.10 An estimation of the importance of the receptor (existing POS) will be based on the data collected as part of the baseline study within the accompanying ES and other policy documents.

### Assessment Criteria

#### *Assessment of sensitivity*

3.1.11 Following the identification of the two POS receptors, their sensitivity has been determined using the criteria set out in Table 3.11 of the 'Design Manual for Roads and Bridges' (DMRB) LA 1127 for community land and assets. These are set-out in Table 1 below.

3.1.12 Where the POS may meet the criteria from varying sensitivity levels, professional judgement has been used to assign the POS to the most appropriate level of sensitivity.

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3.1.13 Given that these are local POS, consideration is focussed on issues of severance and likely use of the sites, highlighted in **Bold** in Table 1.

**Table 1 Environmental Value (Sensitivity)**

Receptor value	Description
Very high	Community land and assets where there is a combination of the following: <b>1) complete severance between communities and their land/assets, with little/no accessibility provision;</b> 2) alternatives are only available outside the local planning authority area; <b>3) the level of use is very frequent (daily);</b> and 4) the land and assets are used by the majority ( $\geq 50\%$ ) of the community
High	Community land and assets where there is a combination of the following: <b>1) there is substantial severance between community and assets, with limited accessibility provision;</b> 2) alternative facilities are only available in the wider local planning authority area; <b>3) the level of use is frequent (weekly);</b> and 4) the land and assets are used by the majority ( $\geq 50\%$ ) of the community.
Medium	Community land and assets where there is a combination of the following: <b>1) there is severance between communities and their land/assets but with existing accessibility provision;</b> 2) limited alternative facilities are available at a local level within adjacent communities; <b>3) the level of use is reasonably frequent (monthly);</b> and 4) the land and assets are used by the majority ( $\geq 50\%$ ) of the community.
Low	Community land and assets where there is a combination of the following: <b>1) limited existing severance between community and assets, with existing full Disability Discrimination Act (DDA) 1995</b> 2) alternative facilities are available at a local level within the wider community; <b>3) the level of use is infrequent (monthly or less frequent);</b> and 4) the land and assets are used by the minority ( $\leq 50\%$ ) of the community.
Negligible	Community land and assets where there is a combination of the following: <b>1) no or limited severance or accessibility issues;</b> 2) alternative facilities are available within the same community; <b>3) the level of use is very infrequent (a few occasions yearly);</b> and 4) the land and assets are used by the minority ( $\leq 50\%$ ) of the community.

Source: Table 3.12 of DMRB LA 112 Significance of effect

*Assessment of magnitude of impact*

3.1.14 The criteria for assessing the magnitude of impact has been determined using the criteria set out in Table 2, based on the latest DMRB definitions.

**Table 2 Criteria for assessing magnitude of impact**

Magnitude of impact	Typical Description
Major	<ul style="list-style-type: none"> <li>Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements. e.g. direct acquisition and demolition of buildings and direct development of land to accommodate highway assets; and/or</li> <li>Introduction (adverse) or removal (beneficial) of complete severance with no/full accessibility provision.</li> </ul>

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Magnitude of impact	Typical Description
Moderate	<ul style="list-style-type: none"> <li>Partial loss of/damage to key characteristics, features or elements, e.g. partial removal or substantial amendment to access or acquisition of land compromising viability of property, businesses, community assets or agricultural holdings; and/or</li> <li>Introduction (adverse) or removal (beneficial) of severe severance with limited/moderate accessibility provision.</li> </ul>
Minor	<ul style="list-style-type: none"> <li>A discernible change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements, e.g. amendment to access or acquisition of land resulting in changes to operating conditions that do not compromise overall viability of property, businesses, community assets or agricultural holdings; and/or</li> <li>Introduction (adverse) or removal (beneficial) of severance with adequate accessibility provision.</li> </ul>
Negligible	<ul style="list-style-type: none"> <li>Very minor loss or detrimental alteration to one or more characteristics, features or elements. e.g. acquisition of non-operational land or buildings not directly affecting the viability of property, businesses, community assets or agricultural holdings; and/or</li> <li>Very minor introduction (adverse) or removal (beneficial) of severance with ample accessibility provision</li> </ul>

Source: Table 3.12 of DMRB LA 112 Significance of effect

3.1.15 Once the sensitivity of receptors and magnitude of impacts have been established, the overall significance of effects will be assessed using the matrix in Table 3.

3.1.16 Significance of effects can be neutral, beneficial or adverse and has been further informed by considering the following:

- Permanence of effect (temporary or permanent);
- Type of effect (direct or indirect); and
- Duration of effect (short-term or long-term).

3.1.17 In general, temporary effects are for a limited period of time i.e. not permanent. This limited period can vary depending on the activity. Short-term effects are predicted to last for several months up to a few years and would generally apply for the duration of the construction period. Long-term effects are predicted to last beyond this, for several years. Further detail is contained in Section 5: Potential Effects.

**Table 3 Significance of effect matrix**

		Magnitude of impact (degree of change)				
		No change	Negligible	Minor	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or Large	Large or Very Large	Very Large
	High	Neutral	Slight	Slight or Moderate	Moderate (or Large)	Large or Very Large
	Medium	Neutral	Neutral or Slight	Slight	Moderate	Moderate or Large
	Low	Neutral	Neutral or Slight	Neutral or Slight	Slight	Slight or Moderate
	Negligible	Neutral	Neutral	Neutral or Slight	Neutral or Slight	Slight

Source: DMRB LA 104 - Environmental assessment and monitoring.

- 3.1.18 Where Table 3 identifies two potential outcomes e.g. Moderate (significant) or Large (significant), professional judgement has been applied in each instance to determine the appropriate level of significance.
- 3.1.19 Using the described significance of effect matrix classification (Table 3), the effects of the Very Large, Large or Moderate category are deemed to be significant for the purposes of this assessment (grey shaded areas).

### Consultation

- 3.1.20 Consultation with the landowner and Cambridge City Council (prospective lessee) has been undertaken in relation to the POS affected by the proposed Development within Hobson's Park, along with discussions with the Sixth Form College regarding the land-take requirements arising from the proposed Development. Consultation with the Greater Cambridge Shared Planning (shared planning service for South Cambridgeshire District Council and Cambridge City Council) has taken place which has confirmed the areas of land affected by the proposed Development which would be classed as POS, as set out in Table 5.
- 3.1.21 As stated above, where the legislative provisions are met, there is a statutory requirement to provide exchange land that is equally advantageous to the owner, those exercising rights over POS land (if any) and those persons making use of POS land, in circumstances where POS land is to be compulsorily acquired.
- 3.1.22 Network Rail (as promoter of the TWAO) has attempted to enter into negotiations with the owner (and their prospective lessee) of the POS within Hobson's Park to be compulsorily acquired for the permanent works. These discussions have ceased, as Network Rail did not want to impact the completion of the lease negotiations between the owner and the lessee. Network Rail has been notified by the landowner and prospective lessee, that an agreement for the acquisition of POS land within Hobson's Park will not be possible either prior to submission of or during the process for determination of the Order. Network Rail has therefore included in the TWAO compulsory acquisition powers over the POS required for the permanent works.
- 3.1.23 Network Rail has contacted the landowner of the proposed exchange land to notify them of the requirement to compulsorily acquire the replacement POS.

## 4 Baseline

### Data sources

- 4.1.1 Information for the baseline conditions was collected from desk-based studies, including the accompanying ES and other policy documents, as well as consultation with Greater Cambridge Shared Planning.
- 4.1.2 The following sources of planning information have been used to inform the Assessment:
- Cambridge City Council Local Plan: Allocations and Designations;
  - South Cambridgeshire Local Plan: Allocations and Designations;
  - Network Rail geo-RINM viewer which provides a GIS map-based view of Network Rail's geographic data, including land ownership and leasehold information, operational land boundaries etc.

### Baseline

#### *Definition of Open Space*

- 4.1.3 The 1981 Act provides the following definition of open space for the purposes of that Act, namely, *'land laid out as a public garden, or used for the purposes of public recreation, or land which is a disused burial ground'*.
- 4.1.4 Open space is defined in Annex 2: Glossary to the NPPF as, *'All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity'*.

#### *Types of Open Space*

- 4.1.5 It is helpful to this Assessment to set out the various types of open space. (Table 4 below).

**Table 4 Types of open space**

Type of open space	Primary purpose
Parks and recreation areas	Accessible, high quality opportunities for informal recreation and community events. Includes country parks, urban parks, recreation grounds, formal gardens and pocket parks.
Natural and seminatural greenspace	Wildlife conservation, biodiversity and environmental education and awareness. Includes woodlands, local nature reserves, scrubland, grassland, heath or moor, wetlands, wastelands and bare rock habitats, as well as unmanaged and unused sites.
Amenity greenspace	Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas. Includes grassed areas in housing estates and village greens.
Allotments and community food growing	Opportunities for people to grow their own produce as part of the long term promotion of sustainability, health and social inclusion. Includes allotments, community gardens and community orchards.
Provision for children and young people	Areas designed primarily for play and social interaction involving young people, such as equipped play areas, ball courts, multiuse-games areas, skateboard areas and teen shelters.
Cemeteries and	Quiet contemplation and burial, often linked to wildlife



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Type of open space	Primary purpose
churchyards	conservation and biodiversity
Green corridors	Walking, cycling or horse riding, whether for leisure purposes or travel, and opportunities for wildlife migration. Includes greenways, cycleways and pedestrian routes, towpaths along canals and riverbanks, bridleways and rights of way.
Informal Open Space	Used by people of all ages for informal unstructured recreation such as walking, relaxing, or a focal point, ranging from formal planted areas and meeting places to wilder, more natural spaces, including green linkages.

- 4.1.6 No allotments, or cemeteries and churchyards are impacted by the proposed Development.
- 4.1.7 It is recognised that areas of open space can provide health and recreation benefits to people living and working nearby; have an ecological value and contribute to green infrastructure, as well as being an important part of the landscape and setting of built development, and an important component in the achievement of sustainable development.
- 4.1.8 There is one informal open space, Hobson's Park (identified as site OS1) within this Assessment that is encroached by the proposed Development site boundary highlighted (edged yellow) in Figure 2 below. This area is part of the Cambridge Green Belt and has been laid out as a public recreation area for the benefit of the adjacent Great Kneighton residential development and Cambridge Biomedical Campus.
- 4.1.9 The second POS (identified as site OS2) is designated as protected open space within Cambridge City Council's Local Plan (2018) under Policy 67. The site is encroached by the proposed Development site boundary (edged red in Figure 2 below) and forms the grounds of the Long Road Sixth Form College.
- 4.1.10 No relevant protected open space has been identified as falling within the proposed Development site boundary in the South Cambridgeshire Local Plan (2018).
- 4.1.11 Table 5 provides details of the two POS land within the site boundary which will be impacted during construction and operation of the proposed Development. The Table sets out a brief description of the land, along with details of the temporary land take i.e. land required during the construction phase (temporary possession) and any permanent land take required for the operation of the proposed Development.
- 4.1.12 This information has been used to inform the potential effects arising from the proposed Development. Baseline conditions for each of the land plots is also included within the site description in Section 5.

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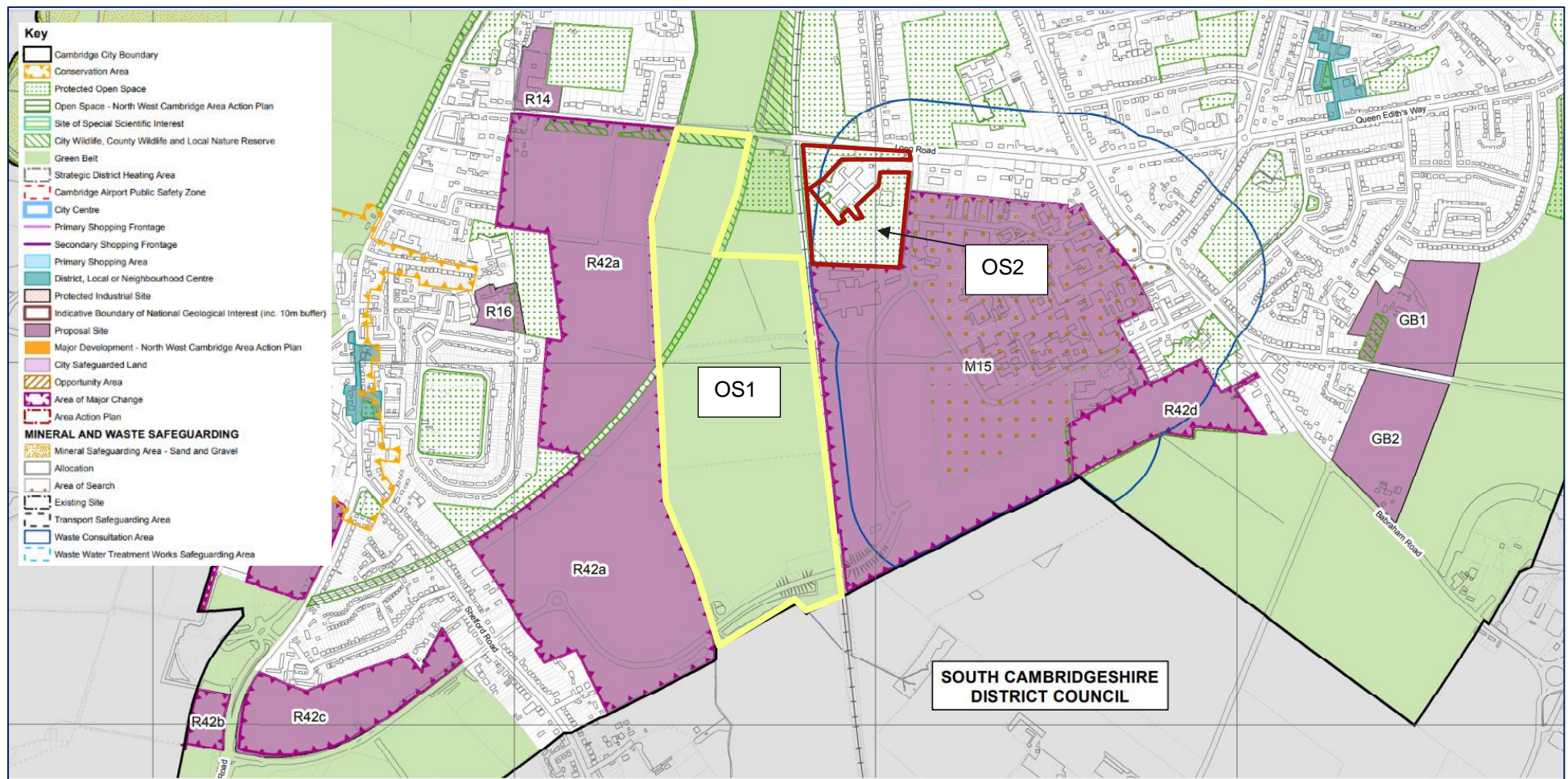


Figure 2 Extract from Cambridge Local Plan (2018) Policies Map



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**Table 5 Identified open space within the proposed Development Boundary**

Site	Public Open Space TWAO Land Plans Plot Ref	Description of public open space impacted	Sport Use	Wildlife Habitat Network/ Biodiversity value	Recreational use	Visual amenity	Temporary land take required (construction) m2	Permanent Land take required (operational) m2	Proposed Use of land
OS1	Temporary Possession Plots: <ul style="list-style-type: none"> <li>• 002</li> <li>• 004</li> <li>• 004d</li> <li>• 004e</li> <li>• 004f</li> <li>• 005</li> <li>• 006</li> <li>• 006b</li> <li>• 008</li> <li>• 010</li> <li>• 011</li> <li>• 084</li> <li>• 085</li> <li>• 087</li> <li>• 090</li> </ul>	Hobson's Park at Great Kneighton, totalling around 120 acres, it is the focus of the Great Kneighton residential development. It contains woodland, four ponds, one of which is a 50,000m2 bird reserve, allotments, playing fields for the new secondary school, and a range of play areas.	No	Yes	Yes	Yes	170,503	None	Temporary access and use as a site compound for construction of the western station areas including storage and sorting areas for excavated materials prior to removal off-site. Land will be returned to POS after construction has been completed
OS1	Permanent Land Acquisition Plots: <ul style="list-style-type: none"> <li>• 003</li> <li>• 004a</li> <li>• 004b</li> <li>• 004c</li> <li>• 005a</li> <li>• 006a</li> </ul>	Hobson's Park at Great Kneighton, totalling around 120 acres, it is the focus of the Great Kneighton development. It contains woodland, four ponds, one of which is a 50,000m2 bird reserve, allotments, playing fields for the new secondary	No	Yes	Yes	Yes	None	20,439	Permanent acquisition for siting of the western station building, platform, cycle parking and hard landscaping areas and the associated widening of the operational railway corridor to

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	<ul style="list-style-type: none"> <li>• 007</li> <li>• 084a</li> </ul>	school, and a range of play areas.							service the new station. In addition, a separate rail systems compound is required south of Addenbrooke's Road bridge. This will result in exchange land being offered for the permanent loss of POS.
OS2	Temporary Possession Plots: <ul style="list-style-type: none"> <li>• 012</li> <li>• 013</li> </ul>	The grounds of Long Road Sixth Form College	Yes	Yes	Yes	Yes	2,761	None	Temporary access and use as a site compound for construction of the Up Loop line and associated switches and crossings. Land will be returned to POS after construction has been completed
OS2	Permanent Land Acquisition Plots: <ul style="list-style-type: none"> <li>• 014</li> </ul>	The grounds of Long Road Sixth Form College	Yes	Yes	Yes	Yes	None	303	Permanent acquisition of a narrow strip of land bordering the existing operational railway corridor to accommodate the new Up Loop line. This will result in exchange land being offered for the permanent loss of POS.

## 5 Potential effects

- 5.1.1 Potential effects are split into construction and operational impacts. For the purpose of this Assessment, construction impacts are reported to be short-term temporary impacts.
- 5.1.2 Operational impacts are long-term or permanent impacts affecting areas of POS after the construction phase is complete and the scheme is operational.

### Construction

- 5.1.3 Areas of the two affected POS will be required to accommodate temporary construction activities. These are shown indicatively in Figure 2 below shaded blue (TL1 – Hobson's Park) and green (TL2 – Long Road Sixth Form College).

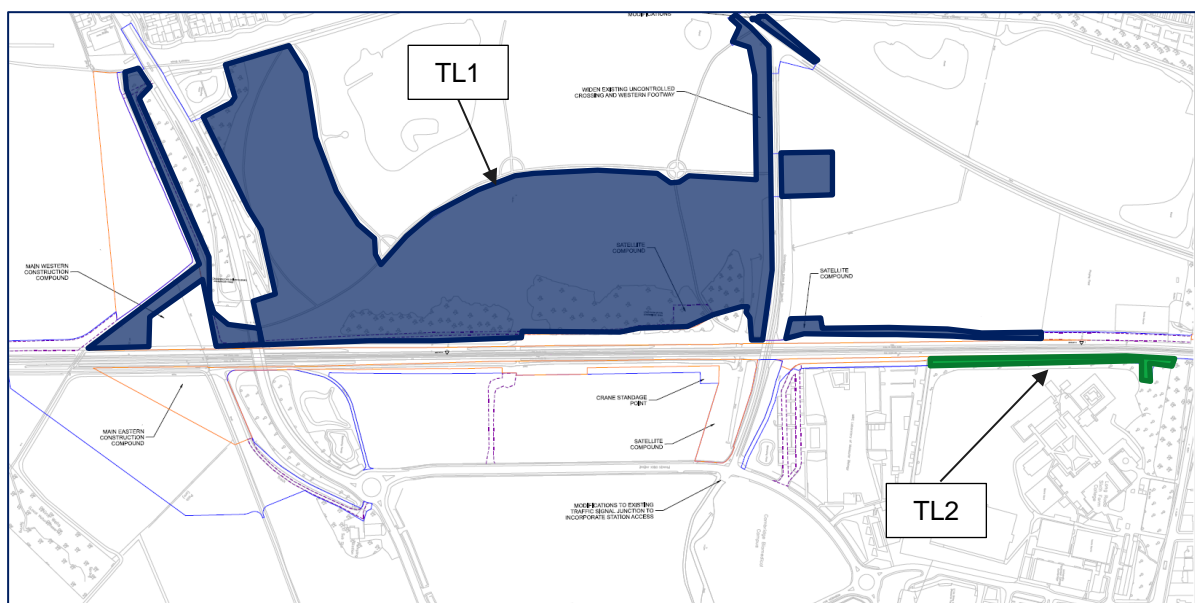


Figure 2 Temporary land take within POS

- 5.1.4 Land taken during construction is only required temporarily, and therefore there is no requirement under the 1981 Act to consider the provision of exchange land. This section therefore assesses only the potential environmental impacts during the construction phase, and not the wider impacts of the land take.

### *Site Ref TL1 – Hobson's Park*

- 5.1.5 An area of POS is required to provide temporary access and use as a site compound for construction of the western station areas including storage and sorting areas for excavated materials prior to removal off-site.
- 5.1.6 The site (TL1) is part of the Hobson's Park at Great Kneighton. The land is not formally designated as protected open space within the Local Plan, although lies within the designated Green Belt. The land required for construction of the Scheme is 170,503m<sup>2</sup> out of a total Park area of 482,880m<sup>2</sup> (approximately 35%). The POS affected does not form part of a playing field, common land or allotment.

- 5.1.7 The Park has several informal paths throughout but there is no formal PRoW. The area of POS directly affected by the proposed Development is used on a daily basis by members of the public for recreational purposes. The remaining areas of Hobson's Park POS will not be affected or acquired temporarily as part of the proposed Development and will remain available to the public during the construction phase.
- 5.1.8 Chapter 8 (Biodiversity) of the accompanying ES states that the Scheme will result in a temporary, adverse effect to Hobson's Park that is significant at the local level in the short term (3-5 years) until replacement planting or natural regeneration becomes established. After this point, no significant residual effects are predicted. The loss of semi-improved neutral grassland, scrub and woodland will be mitigated via re-instatement and/or natural regeneration following construction.
- 5.1.9 Compensatory planting will be undertaken in line with the Illustrative Landscaping Plans (Drawing Nos. 158454-ARC-00-ZZ-DRG-EEN-000074, 158454-ARC-00-ZZ-DRG-EEN-000075 and 158454-ARC-00-ZZ-DRG-EEN-000076) submitted with the TWAO application. Further details (including planting plans) will be included within the landscape design to be submitted pursuant to a condition attached to the deemed planning permission.
- 5.1.10 Visual amenity for users of the POS is likely to be affected during construction due to the large area of land to be occupied and the associated vegetation removal required. Given the limited timescale of the impact on visual and recreational amenity and the proposed mitigation described in Chapter 13 – Landscape and Visual of the ES, a **minor** adverse effect is expected during the construction phase which is not significant. Noise and dust are not considered to generate any impacts in view of the proposed mitigation measures proposed within the ES and the preparation of a Code of Construction Practice (CoCP).
- 5.1.11 The land will be returned to POS following completion of the construction works.

*Site Ref TL2 – Long Road Sixth Form College grounds*

- 5.1.12 An area of POS (TL2) is required to provide temporary access and use as a site compound for construction of the Up Loop line which will pass through the eastern side of the proposed new Cambridge South Station.
- 5.1.13 The site is a wooded area within the grounds of the Long Road Sixth Form College. The land is designated as protected open space within the Cambridge Local Plan. The land required for construction of the Scheme is 2,761m<sup>2</sup> out of a total site area of some 42,500m<sup>2</sup> (approximately 6.5%). The POS affected does not form part of a playing field, common land or allotment.
- 5.1.14 Chapter 8 (Biodiversity) of the accompanying ES states that the Scheme will result in a temporary, **adverse** effect to Long Road Sixth Form College grounds that is significant at the local level in the short term (3-5 years) until replacement planting or natural regeneration becomes established. After this point, no significant residual effects are predicted. The loss of semi-improved neutral grassland, scrub and woodland will be mitigated via re-instatement and/or natural regeneration following construction.
- 5.1.15 Compensatory planting will be undertaken in line with the Illustrative Landscaping Plans (Drawing Nos. 158454-ARC-00-ZZ-DRG-EEN-000074) submitted with the TWAO application. Further details (including planting plans) will be included within the landscape design to be submitted pursuant to a condition attached to the deemed planning permission.
- 5.1.16 Visual or recreational amenity for users of the POS is unlikely to be affected during construction due to the adjacent area of woodland which will screen the construction activities and the associated vegetation removal required. Given the limited timescale of the impact on visual and recreational amenity and the proposed mitigation described in Chapter 13 –

Landscape and Visual of the ES, a **minor** adverse effect is expected during the construction phase which is not significant. Noise and dust are not considered to generate any impacts in view of the proposed mitigation measures proposed within the ES and the preparation of a Code of Construction Practice (CoCP).

5.1.17 The land will be returned to POS following completion of the construction works.

#### *Summary of construction phase effects*

5.1.18 Table 6 sets out the assessment of effects on POS during the construction phase.

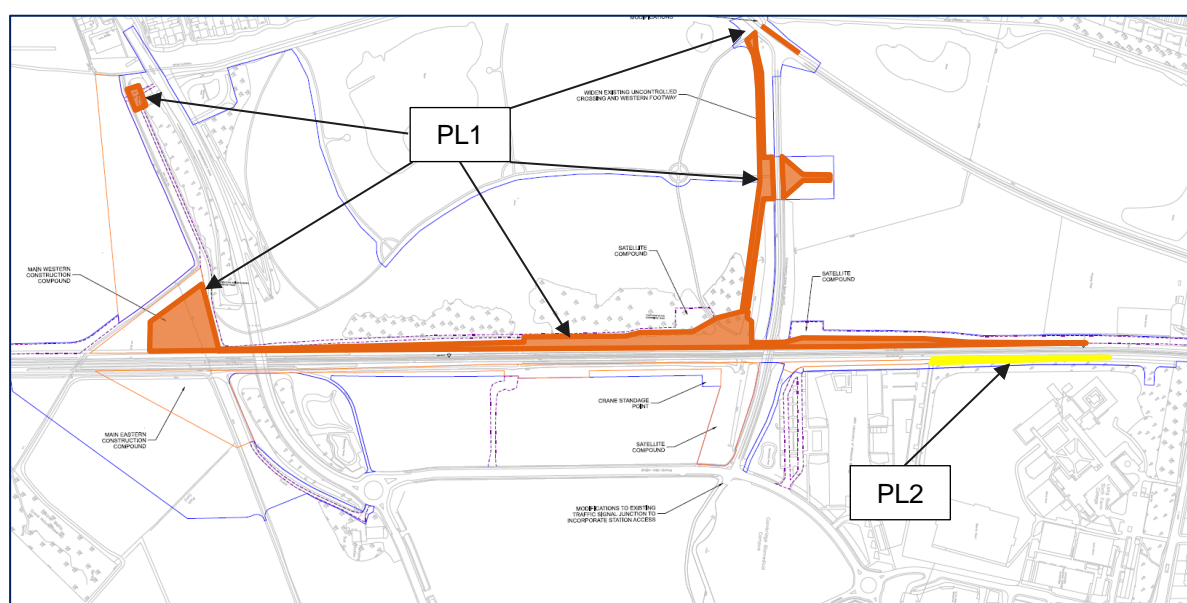
**Table 6 Summary of potential temporary effects on POS sites during construction**

Site Ref.	Sensitivity of receptor	Magnitude of impact	Significance of effect
TL1	Very high	Negligible	Slight
TL2	Medium	Negligible	Slight

Based on the previously outlined assessment criteria in Tables 1 and 2 above, along with the description of the site characteristics in Table 5, the significance of effect is considered to be not significant for both TL1 and TL2 during the temporary construction period.

#### Operational

5.1.19 Both areas of POS will also be acquired on a permanent basis to accommodate the operational activities of the proposed Development. These are shown indicatively in Figure 3 below, referenced as PL1 (Hobson's Park - Orange) and PL2 (Long Road Sixth Form College - Yellow). A detailed drawing titled 'Open Space and Exchange Land' (Drawing Ref: 158454-ARC-00-ZZ-DRG-EMF-200010) is included in the TWAO application within document NR09: Deposited Plans and Sections, Rights of Way Plans and Open Space Plan. In line with the requirements of the TWAO, acquisition of the exchange land is proposed to be undertaken prior to the permanent removal from public use of PL1 and PL2.



*Figure 3 Permanent land take in Hobson's Park and Long Road Sixth Form College*

- 5.1.20 The statutory requirements of the 1981 Act to provide replacement open space apply unless the exceptions in section 19(1) are applicable (as set out at Section 2 above). This Section assesses the potential environmental impacts of the permanent use of the POS affected by the proposed Development, as well as considering the statutory requirements of the 1981 Act and setting out if exchange land is to be provided, and where this exchange land will be located. It also describes the merits of the exchange land when considered against the criteria in section 19(1)(a) of the 1981 Act. Further details of the assessment of potential exchange land sites are set out in Appendix 1.
- 5.1.21 Section 19(1)(a) of the 1981 Act requires that in the provision of exchange land, the replacement open space must be not less in area and must be equally advantageous to the public.
- 5.1.22 The area adjacent to the proposed Development is bounded by Cambridge Biomedical Campus to the east and the Clay Farm residential development to the west. OS1 (Hobson's Park) forms a buffer between the commercial and residential areas and was created under a Section 106 Agreement for the Clay Farm development. OS2 (Long Road Sixth Form College grounds) is bounded to the north by Long Road, east and south by the Cambridge Biomedical Campus and on the west by the existing railway. For these reasons, there is no land directly adjacent to the proposed Development suitable for acquisition as replacement POS. Network Rail has therefore been required to consider the use of agricultural land parcels to the south of Addenbrooke's Road and the Cambridge Biomedical Campus within the Cambridge Green Belt.
- 5.1.23 Four potential areas of exchange land were considered suitable for the provision of replacement POS, and compliant with the requirements of s19(1)(a). The areas are detailed in Table 7 below and delineated graphically in Figure 4.

**Table 7 Potential Areas of Exchange Land**

Exchange Land No.	Description
EL1	Agricultural land to the south-east of Addenbrooke's Road adjacent to the eastern boundary of the railway
EL2	Agricultural land to the south of Dame Mary Archer Way
EL3	Agricultural land to the south-east of Nine Wells Local Nature Reserve
EL4	Agricultural land to the south of Addenbrooke's Road and south-west of Hobson's Brook



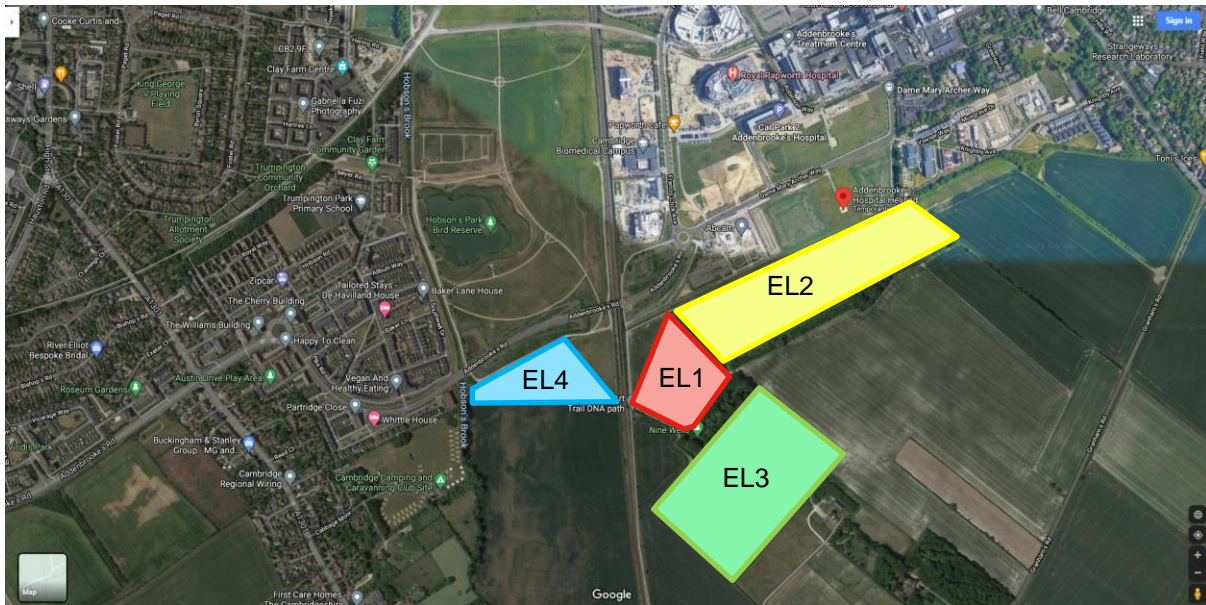


Figure 4 Location of Potential Areas of Exchange Land

5.1.24 The assessment of the four identified exchange land sites has been undertaken in line with the criteria set out for replacement land set-out in national guidance and local planning policy, as detailed in Appendix 1. This has concluded that site EL4 should be taken forward as the most appropriate location for the provision of replacement POS to be lost at Hobson's Park and the grounds at Long Road Sixth Form College

#### Site Ref PL1 – Hobson's Park

5.1.25 An area of POS (PL1) is required within Hobson's Park to allow Network Rail to site the western station building, platform, cycle parking and hard landscaping areas and the associated widening of the operational railway corridor to service the new station. In addition, a new cycle and pedestrian path will be constructed across the northern extent of Hobson's Park with a separate pedestrian footpath projecting north across the guided busway into the Active Recreation Area. A separate rail systems compound is required south of Addenbrooke's Road bridge also within the confines of Hobson's Park. The permanent land take requirement is 17,980m<sup>2</sup>, which equates to 3.7% of the total area of Hobson's Park. The area is used by the public on a daily basis for recreational purposes e.g. dog walking.

5.1.26 Within the affected POS at Hobson's Park an area of 464,900m<sup>2</sup> will not be acquired and will remain available to the public after the construction phase of the proposed Development. Given the limited visual impact of the proposed Development on the Park (ES Chapter 13 – Landscape and Visual) and limited impacts in respect of recreational amenity (ES Chapter 15 – Population and Human Health) neutral effects are expected during the operational phase which are **not significant**.

5.1.27 Table 8 sets out details of the provision of exchange land against the statutory test at s19(1)(a) of the of the 1981 Act for Site Ref PL1.

**Table 8 Section 19 Statutory Test for Hobson's Park (Site Ref PL1)**

	Plots:	Area:
Land Plots to be permanently acquired	003 004a 004b,004c,005a,006a 007 084a 086	2,841m <sup>2</sup> 169m <sup>2</sup> 4,309m <sup>2</sup> 8,304m <sup>2</sup> 4,664m <sup>2</sup> 152m <sup>2</sup> <b>20,439m<sup>2</sup> Total</b>
Exchange land plot references	092	20,840m <sup>2</sup>
Current use of Public Open Space	<p>The POS to be acquired forms part of Hobson's Park which is currently an informal open space created to mitigate the adjacent Clay Farm residential development to the west of the POS. There are a number of permissive paths within the POS with connectivity provided to an area to the north of the Guided Busway, known as the Active Recreation Area (ARA) beneath the Guided Busway bridge (Addenbrooke's Bridge). An area to the south of Addenbrooke's Road provides vehicular access to the POS via a maintenance track which runs parallel to the southern highway boundary of Addenbrooke's Road and then passes beneath the highway bridge (Nine Wells Bridge) to access the main area of the POS. A cross section of the public use the area, including dog walkers, cyclists and runners as well as workers from the Cambridge Biomedical Campus located to the east of the POS.</p> <p>The POS to be acquired forms part of a continuous area of POS which expands to the west of the POS to be acquired. The remaining POS available within the Park is approximately 46.2ha (462,000m<sup>2</sup>) which will remain available for use by the public. The POS which Network Rail is acquiring is of limited amenity value in comparison to the wider area of POS available to the public, due to its proximity to the existing operational railway corridor.</p> <p>Whilst the POS is well used on a daily basis by the local community and is considered to be an important community asset, the acquisition of the POS land does not affect the use of the wider area of POS during the operational phase and the public recreational activities will continue following acquisition of the land. The POS being acquired is of low value as it is predominately scrub land and is bordered by the railway to the east. It is also screened from the wider area of POS by landforms (2-3m high hillocks) which have been planted with saplings. A maintenance track running parallel to the railway, limits the ability of the public to use it particularly given the more favourable adjacent, wider area of POS.</p>	
Consideration of the need for provision of exchange land	<p>Network Rail is offering exchange land to compensate for the loss of the POS.</p> <p>The acquisition of the POS will allow the construction of Cambridge South Station and delivery of the overall proposed Development. Without the acquisition of this land the Scheme cannot be delivered, and the significant benefits of the proposed Development as set out in further detail in Chapter 16 (Socio-economic) of the accompanying ES will not be realised.</p> <p>The exchange land is considered to have equal if not greater quality to the POS being lost and will be at least as advantageous to the public. The exchange land (site EL4) will be provided to the south of Addenbrooke's Road and is 20,840m<sup>2</sup>.</p> <p>The exchange land is being provided in the immediate locality for</p>	



	<p>the reasons set out in Appendix 1, with connectivity provided by way of a new accommodation bridge and permissive right of way. This will enable a direct link between the existing areas of POS and the proposed exchange land.</p> <p>Providing exchange land in this area offers the ability for Network Rail to provide a high-quality area that has a greater degree of accessibility to the public and is not constrained by gradients or vegetation. The exchange land will form part of the overall landscape scheme, with the aim to maximise public amenity and enjoyment through the creation of informal footpaths, biodiverse habitats (including a pond), seating areas and landscape works which will be designed in consultation with Cambridge City Council, South Cambridgeshire District Council and the Hobson's Conduit Trust, as landowner. A detailed landscape scheme will be submitted as part of the discharge of deemed planning conditions.</p>
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*Site Ref PL2 – Long Road Sixth Form College grounds*

- 5.1.28 An area of POS (PL2) is permanently required within the grounds of the Long Road Sixth Form College to allow Network Rail to widen the operational railway corridor to allow the eastern platform loop line to be installed and operated. The permanent land take requirement is 303m<sup>2</sup>, which equates to 0.007% of the total area of protected open space within the grounds of the Long Road Sixth Form College. The area is heavily wooded and vegetated and runs directly parallel to the Network Rail operational boundary, which restricts the use of the space for public recreation.
- 5.1.29 PL2 forms part of Long Road Sixth Form College grounds (POS) which has a total area of approximately 42,500m<sup>2</sup> of which 42,197m<sup>2</sup> will not be acquired and will remain available to the public after the construction phase of the proposed Development. Given the limited visual impact (ES Chapter 13 – Landscape and Visual) and impact on recreational amenity (ES Chapter 15 – Population and Human Health) neutral effects are expected during the operational phase which are **not significant**.
- 5.1.30 Table 9 sets out details of the provision of exchange land against the statutory test at s19(1)(a) of the of the 1981 Act for Site Ref PL1.

**Table 9 Section 19 Statutory Test for Long Road Sixth Form College grounds (Site Ref PL2)**

	Plots:	Area:
Land Plots to be permanently acquired	014	303m <sup>2</sup>
Exchange land plot references	092	20,840m <sup>2</sup>
Current use of Public Open Space	<p>The POS to be used is a narrow strip running parallel to the operational railway boundary. The POS is within the Long Road Sixth Form College's grounds which have been allocated as protected open space within the Cambridge Local Plan. The area is heavily wooded and vegetated which restricts the use of the space for public recreation.</p> <p>The POS required for the proposed Development forms part of a continuous area of POS which expands to the east of the POS to be used. The remaining POS available within the grounds of the Long Road Sixth Form College is approximately 42,200m<sup>2</sup> which will remain available for use by the public. The POS which Network Rail proposes to acquire is of limited amenity value in comparison to the wider area of POS available to the</p>	

	<p>public, due to its proximity to the existing operational railway corridor and the heavy vegetation.</p> <p>The wider POS is well used on a daily basis by the college staff and students and is considered to be an important community asset. Use of the POS for the proposed Development does not affect the use of the wider POS during the operational phase and the public recreational activities will be able to continue following the acquisition of the land. The POS required for the proposed Development is of low value as it is predominately woodland and scrub vegetation bordered by the railway to the west. It is also screened from the remaining areas of POS by the remaining woodland and vegetation which forms the border between the railway and the college grounds.</p>
Consideration of the need for provision of exchange land	<p>Network Rail is offering exchange land to compensate for the loss of all POS impacted by the proposed Development.</p> <p>The exchange land is considered to have equal if not greater quality to the POS being lost and will be more advantageous to the public. The exchange land (site EL4) will be provided to the south of Addenbrooke's Road and is 20,840m<sup>2</sup>.</p> <p>The exchange land is being provided in the immediate locality for the loss of a larger area of POS within Hobson's Park (PL1).</p> <p>Providing exchange land in this area offers the ability for Network Rail to provide a high-quality area that has a greater degree of accessibility to the public and is not constrained by gradients or vegetation. The exchange land will form part of the overall landscape scheme, as set out on the indicative landscape drawings which accompany the request for deemed planning permission, with the aim to maximise public amenity and enjoyment through the creation of informal footpaths, biodiverse habitats (including a pond), seating areas and landscape works which will be designed in consultation with Cambridge City Council, South Cambridgeshire District Council and the Hobson's Conduit Trust, as landowner. A detailed landscape scheme will be submitted as part of the discharge of deemed planning conditions.</p> <p>The permanent use of the POS will allow the construction of Cambridge South Station and delivery of the overall proposed Development. Without this land the Scheme cannot be delivered and the significant benefits of the proposed Development as set out in further detail in Chapter 16 (Socio-economic) of the ES will not be realised.</p>

#### Summary of operational effects

5.1.31 Table 9 details the assessment of effects on POS during the operational phase of the proposed Development.

**Table 9 Summary of potential effects on public open space during operational**

## Phase

Site Ref.	Sensitivity of receptor	Magnitude of impact	Significance of effect
PL1	Medium	Minor	Slight
PL2	Medium	Minor	Slight

- 5.1.32 The acquisition of an area of 2.04ha within an overall area of 46.2ha POS that comprises Hobson's Park, is considered to be of limited amenity value due to its proximity to the existing operational railway corridor and its separation by 2-3m high hillocks planted with saplings from the wider area of POS. For this reason, **no significant effects** are anticipated on POS OS1. In addition, embedded mitigation e.g. re-planting and additional habitat creation is proposed to be implemented, as appropriate compensatory measures to minimise the effects of the proposed Development.
- 5.1.33 Due to the relatively small area of land being used within OS2 and the restricted inaccessibility to the area by the public, **no significant effects** are anticipated on POS OS2. However, as for OS1 compensation measures will be implemented, recognising, in particular the status of the loss of the allocated protected open space.
- 5.1.34 Exchange land is to be provided in accordance with the requirements of the 1981 Act for land to be permanently acquired by the proposed Development. As explained above, in order that the criteria in s19(1)(a) of the 1981 are met, Network Rail has provided an area of exchange land amounting to a combined area of 20,840m<sup>2</sup> in respect of PL1 and PL2.
- 5.1.35 A landscape scheme will be implemented on the exchange land which will be developed in consultation with Cambridge City Council, South Cambridgeshire District Council, Long Road Sixth Form College and the Hobson's Conduit Trust. There will be a period of implementation required for the agreed scheme including planting and installation of amenity facilities e.g. informal footpaths etc. It is therefore anticipated that the exchange land site will become available for use 12 months after construction of the proposed Development is completed.

## 6 Mitigation measures

- 6.1.1 The following section sets out the proposed mitigation measures to minimise the potential effects on the exchange land POS both during construction and operation.

### Construction

- 6.1.2 Mitigation measures will be implemented to minimise the effects on users of POS during the construction phase.
- 6.1.3 The following measures are proposed and are also included in Part A of the Code of Construction Practice. (Appendix 2.4 of the accompanying ES).
- Retention of access to POS where reasonably practicable to do so, taking account of safety issues in terms of potential conflict between users and construction works; and
  - Screening of construction activities through hoarding etc. to minimise disruption to POS.
- 6.1.4 Where vegetation removal is proposed, replacement planting or measures to enable re-growth will be implemented, as set out on the Indicative Landscape Drawings (Drawing Ref. 158454-ARC-00-ZZ-DRG-EEN-000074 to 000077) submitted with the request for deemed planning. Further details (including planting plans) will be included within the landscape design to be submitted to the local planning authority for approval to discharge the relevant deemed planning condition.

## Operation

- 6.1.5 The following compensation measures will be implemented to minimise effects on users of POS when the Scheme becomes operational.
- Replacement planting or measures to enable re-growth will be undertaken in line with the indicative landscape drawings, with further details (including planting plans) included within the landscape design to be submitted to the local planning authority for approval to discharge the relevant deemed planning conditions;
  - Exchange land EL4 to be acquired in order to provide replacement POS to replace that being permanently acquired for the proposed Development; and
  - Landscape scheme to be developed for the exchange land site (EL4) and implemented following approval of the landscape design by the local planning authority, to discharge the relevant deemed planning condition. An indicative landscape layout has been included on Drawing Ref. 158454-ARC-00-ZZ-DRG-EEN-000076 submitted as part of the request for deemed planning.

## 7 Residual effects

### Construction

- 7.1.1 Even allowing for the implementation of compensation measures, **temporary significant** adverse effects are anticipated on Hobson's Park (OS1) and the grounds of Long Road Sixth Form College (OS2).
- 7.1.2 However, these effects are temporary, and it is anticipated that there will **be no long-term significant effects** as a result of the construction of the proposed Development.

### Operation

- 7.1.3 The permanent loss of POS within Hobson's Park (OS1) and in the grounds of Long Road Sixth Form College (OS2) will be compensated for through the provision of exchange land and therefore there will be **no significant residual effects** on POS.
- 7.1.4 The proposed Development will result in the permanent acquisition of 20,742m<sup>2</sup> of POS. As compensation, 20,840m<sup>2</sup> of POS will be provided as exchange land, which is more advantageous to the public being well connected to, and of equal or greater quality, than the POS to be acquired. Therefore, there will be no loss of area or quality of POS as a result of the proposed Development.
- 7.1.5 Visual amenity will be mitigated through the implementation of a landscape scheme, the effects of which will be noticeable during the first full year of operation of the proposed Development (anticipated in 2026), though once the planting becomes established at the end of the 5-year maintenance period for the landscape scheme in 2031, **no significant** residual effects are anticipated.

## 8 References

### 8.1 References

Reference	Title
Ref. 1	Acquisition of Land Act 1981 <a href="https://www.legislation.gov.uk/ukpga/1981/67/contents">https://www.legislation.gov.uk/ukpga/1981/67/contents</a>
Ref. 2	National Planning Policy Framework, (2019) Ministry of Housing, Communities and Local Government <a href="https://www.gov.uk/government/publications/national-planning-policy-framework--2">https://www.gov.uk/government/publications/national-planning-policy-framework--2</a>
Ref. 3	Department for Transport National Networks National Policy Statement (December 2014) <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/387222/npsnn-print.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/387222/npsnn-print.pdf</a>
Ref. 4	Cambridge Local Plan, (2018) Cambridge City Council <a href="https://www.cambridge.gov.uk/local-plan-2018">https://www.cambridge.gov.uk/local-plan-2018</a>
Ref. 5	South Cambridgeshire Local Plan, (2018) South Cambridgeshire District Council <a href="https://www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/the-adopted-development-plan/south-cambridgeshire-local-plan-2018/">https://www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/the-adopted-development-plan/south-cambridgeshire-local-plan-2018/</a>
Ref. 6	Cambridge Inner Green Belt Boundary Study (2015), Cambridgeshire County Council <a href="https://scambs.moderngov.co.uk/documents/s83223/Appendix C A. Cambridge Inner Green Belt Boundary Study_ Main Report.pdf">https://scambs.moderngov.co.uk/documents/s83223/Appendix C A. Cambridge Inner Green Belt Boundary Study_ Main Report.pdf</a> accessed on 19th April 2021



## APPENDIX 1 - Assessment of potential areas of Exchange Land

Network Rail has undertaken an assessment of potential areas of exchange land in the vicinity of the proposed Development in relation to Hobson's Park (OS1) and the grounds of Long Road Sixth Form College (OS2). Four potential areas were identified as detailed in Table A below and delineated in Figure 1.

**Table A Potential Areas of Exchange Land**

Exchange Land No.	Description
EL1	Agricultural land to the south-east of Addenbrooke's Road adjacent to the eastern boundary of the railway
EL2	Agricultural land to the south of Dame Mary Archer Way
EL3	Agricultural land to the south-east of Nine Wells Local Nature Reserve
EL4	Agricultural land to the south of Addenbrooke's Road and south-west of Hobson's Brook



**Figure 1 Location of Potential Areas of Exchange Land**

The identified areas of potential exchange land have been assessed against the following criteria to establish suitability in mitigating the impact of the permanent loss of POS brought about by the proposed Development during its operation. The criteria reflect and are informed by the criteria set out for replacement land in national guidance and local planning policy.

- 1) Quantity: Site area of the replacement land compared to that lost as a result of the proposed Development
- 2) Quality: Usefulness and attractiveness of the replacement land compared to that lost as a result of the proposed Development

### 3) Accessibility: Distance of the replacement land from the site of the proposed Development

All identified areas of potential exchange land are located within the Cambridge Green Belt and are currently used for agricultural purposes.

Each of the listed criteria was assessed against the following values and an associate score attributed as set out in Table B below.

**Table B Criteria Scoring Matrix**

Value	Description	Score
Excellent	Provides a major improvement/enhancement above the current situation	5
Good	Provides a minor improvement/enhancement above the current situation	4
Satisfactory	Matches the existing situation	3
Poor	Provides a minor reduction/detraction from the current situation	2
Very poor	Provides a major reduction/detraction from current the situation	1

The higher the assessment score the more suitable the site is for provision of exchange land for the loss of POS in Hobson's Park (OS1) and within the grounds of Long Road Sixth Form College (OS2).

### Assessment Results

The matrix below sets out the results of the assessment of the potential exchange land sites against the criteria and scoring matrix with relevant comments to explain the assessment score.

**Table C Exchange Land Assessment**

Exchange Land No.	Quantity	Quality	Accessibility	Total
EL1	The site is equivalent in size to the combined area of PL1 and PL2 = Satisfactory (4)	Currently an agricultural field, flat and level, located on the east side of the railway with no direct connectivity to OS1 or OS2 = Poor (2)	Direct connection to National Cycle Network Route 11 and the Genome Path, but located on the east side of the railway so no connectivity to PL1 or PL2 = Poor (2)	8
EL2	The site is larger than the combined area of PL1 and PL2 = Excellent (5)	Currently an agricultural field, flat and level, located on the east side of the railway with no direct connectivity to OS1 or OS2	Direct connection to the Genome Path and Footpath 198/2, but located on the east side of the railway so no connectivity to PL1 or PL2	9

Exchange Land No.	Quantity	Quality	Accessibility	Total
		= Poor (2)	= Poor (2)	
EL3	The site is larger than the combined area of PL1 and PL2 = Excellent (5)	Currently an agricultural field, flat and level, located on the east side of the railway with no direct connectivity to OS1 or OS2 = Poor (2)	Not directly connected to a PRoW or cycle track and located south of the Nine Wells Local Nature Reserve. No connectivity to PL1 or PL2 = Very poor (1)	8
EL4	The site is larger than the combined area of PL1 and PL2 = Excellent (5)	Currently an agricultural field, flat and level, located on the west side of the railway, directly south of OS1 = Satisfactory (3)	Not directly connected to a PRoW or cycle track, but will be directly connected to PL1 via the new accommodation bridge over Hobson's Brook to be provided as part of the proposed Development = Good (4)	12

### Conclusion

The four identified potential exchange land sites have been assessed using the criteria and scoring matrix detailed above. Following this assessment EL4 has scored highest due to the location of the site directly adjacent to the POS to be permanently acquired as part of the proposed Development, on the west side of the railway and will be made accessible following construction of the accommodation bridge which already forms part of the proposed Development. Therefore, site EL4 satisfies the statutory test at s19(1)(a) of the Acquisition of Land 1981 Act.

Network Rail will notify the affected landowner, Cambridge City Council and South Cambridgeshire District Council regarding the intention to proceed in utilising its compulsory purchase powers in the provision of exchange land at site EL4.