



DCO Submission

Environmental Statement

**Chapter 17: Summary of Effects**

On behalf of  
Oxfordshire Railfreight Limited

**Document 6.17**

Prepared by Oxalis Planning Ltd  
**March 2026**

---

## CONTENTS

**17.1 INTRODUCTION**

**17.2 STATEMENT OF SIGNIFICANCE AND SUMMARY OF EFFECTS**

**17.3 CONCLUSIONS**

## 17.1 INTRODUCTION

17.1.1 This Environmental Statement (ES) has been prepared to accompany the application for a Development Consent Order for the Oxfordshire Strategic Rail Freight Interchange (known as 'OxSRFI'). The application is for a Development Consent Order (DCO) for a Strategic Rail Freight Interchange (SRFI) on land adjacent to the Chiltern Main Line and close to M40 Junction 10 in Cherwell District, Oxfordshire

17.1.2 The ES chapters which comprise this ES have been progressed following two stages of formal public consultation, the most recent being the Stage 2 (Statutory Consultation) in Autumn 2025 when the draft ES chapters formed the Preliminary Environmental Information Report (PEIR). This ES represents a comprehensive assessment of the likely environmental effects of the Proposed Development.

17.1.3 A detailed description of the proposal is set out in ES Chapter 2 (Description of Development and Alternatives). However, in summary, the main components of the OxSRFI scheme are as follows:

- An intermodal rail freight terminal, including rail connections and improvements to the Chiltern Main Line including works to Ardley Tunnel, rail sidings, container storage, HGV parking and associated buildings;
- Up to 603,850 sqm (approx. 6.5 million square feet) of warehousing and ancillary buildings, plus up to 201,283 sqm of additional floorspace in the form of mezzanines;
- The retention, rejuvenation and re-use of Ashgrove Farm and associated buildings, including Ashgrove Cottages as part of a 'Central Hub' to provide estate management, training and communal facilities to serve the site;
- A secure, dedicated HGV Parking area including driver welfare facilities;
- New road infrastructure and works to the existing road network, including improvements to M40 J10 and junctions on the A43 provision of the principal site access and associated works on the B430, a bypass to the village of Ardley linking the site directly with M40 J10, a relief road around the north eastern side of the village of Middleton Stoney, a link road connecting the B430 to Camp Road, improvements to M40 J9 and other highway improvements at junctions on the local highway network and related traffic management measures;

- New and improved pedestrian and cycle infrastructure both on the Main Site and in the surrounding area connecting the Main Site to local communities;
- Demolition of existing structures within the Application Site – the In Vessel Composting (IVC) Facility will be demolished after the lease ends in 2030;
- Earthworks to create development areas, construct the rail freight terminal and connections to the Mainline and form landscape screen mounding;
- The retention of key landscape features together with new strategic landscaping, general planting and biodiversity enhancements.
- On and off-site works associated with utilities including for foul drainage connections.

## 17.2 STATEMENT OF SIGNIFICANCE AND SUMMARY OF EFFECTS

17.2.1 Table 17.1 below summarises the significant effects identified across the ES within the ES Chapters.

**Table 17.1: Summary of significant effects identified within the ES Chapters.**

ES Chapter	Levels of overall significance identified within the ES Chapter
Transport – Chapter 3	<p><b><u>Construction phase:</u></b>                      On implementation of the Construction Environmental Management Plan (CEMP) (ES Appendix 2.3), it is considered that the impacts of the construction phase of development, will be neutral or temporary slight adverse effects, which either have no effect or are not significant in EIA terms</p> <p><b><u>Operational phase:</u></b>                      The range of likely effects during the operational phase are as set out for the Completion Year 2034, the 2031 Opening Year, and 2042 Sensitivity Test (see ES Appendices 3.8 to 3.10 for further details).</p> <p>The OxSRFI scheme includes embedded mitigation including the proposed Highway Works, active travel and footway/cycle/bridleway improvements, and the public transport strategy (PTS). This includes:</p> <ul style="list-style-type: none"> <li>• M40 J10 improvements;</li> <li>• the Ardley Bypass;</li> <li>• the Middleton Stoney Relief Road (MSRR);</li> <li>• the Heyford Park Link Road (HPLR);</li> <li>• M40 J9 improvements.</li> </ul> <p>The residual transport impacts associated with the operational phase (after the additional mitigation measures are considered) would give rise to a mixture of</p>

neutral or permanent slight adverse and beneficial effects, which either have no effect or are not significant in EIA terms. A summary of those residual effects (after the additional mitigation measures are considered) with regards to transport matters during the operational phase are set out accordingly to the relevant works/links below.

- M40 Junction 10 and A43 Trunk Road Improvement – driver delay – as part of the embedded mitigation, there will be a **very large permanent beneficial (significant)** residual effect without additional mitigation.
- Ardley Station Bridge on B430 (replacement of with new bridge) – road user safety – a **moderate permanent beneficial (significant)** residual effect.
- A43 Barleymow Roundabout – driver delay – a **slight permanent beneficial (not significant)** residual effect with an additional mitigation scheme identified to increase capacity at the junction.
- Link 14 - Ardley Roundabout circulatory – severance / Non-Motorised Amenity (NMU) amenity – a **moderate permanent beneficial** which is **not significant** due to the NMU demand being low.
- Link 18, 19, 20 - B340 between MSRR and Principal Site Access – NMU Amenity / Fear and Intimidation – a **moderate permanent beneficial (significant)** residual effect without additional mitigation.
- Link 24 B430 - Station Road (south of Somerton Road) – Severance / NMU Amenity / Fear and Intimidation – a **moderate permanent beneficial (significant)** residual effect without additional mitigation.
- Link 25 B430 - Station Road (south of Ardley Road) – NMU Amenity / Fear and Intimidation – a **moderate permanent beneficial (significant)** residual effect without additional mitigation.
- Link 26 B430 - Station Road (between Ardley Road) – Severance / NMU Amenity / Fear and Intimidation – a **moderate permanent beneficial (significant)** residual effect without additional mitigation.
- Link 38 - MSRR – NMU Amenity / Driver Delay – a **moderate permanent beneficial (significant)** residual effect without additional mitigation.
- Link 40 - B430/B4030 Middleton Stoney crossroads – Severance / NMU Delay / NMU Amenity – a **moderate permanent beneficial (significant)** residual effect without additional mitigation. In terms of Driver Delay, the OxSRFI scheme will have a **large permanent beneficial (significant)** residual effect without additional mitigation.
- Link 41 - B4030 Middleton Stoney Road between A4095 Roundabout and Empire Road – Severance / Driver Delay – a **slight permanent beneficial (not significant)** residual effect.

	<ul style="list-style-type: none"> <li>• <u>Link 66 - New Row, Bucknell</u> – NMU Amenity – a <b>moderate permanent beneficial (not significant)</b> residual effect due to absolute flows remaining very low.</li> <li>• <u>Link 106 - B430 Ardley Road (north of Middleton Stoney)</u> - Severance / NMU Delay / Driver Delay – a <b>large permanent beneficial (significant)</b> residual effect without additional mitigation. In terms of fear and intimidation, there would be a <b>moderate permanent beneficial (significant)</b> residual effect without additional mitigation.</li> <li>• <u>Link 125 - Middleton Stoney Road between A4095 roundabout and Ludlow Road</u> – NMU Delay – a <b>moderate permanent beneficial (significant)</b> residual effect with an additional mitigation scheme identified to increase capacity and provide signal-controlled Toucan crossings at all arms.</li> <li>• <u>Link 144 - Church Lane (Weston-on-the-Green)</u> – NMU Amenity – a <b>moderate permanent beneficial (significant)</b> residual effect without additional mitigation.</li> <li>• <u>Link 165 - B430 NB approach to Ardley Roundabout</u> – Driver Delay – a <b>moderate permanent beneficial (significant)</b> residual effect without additional mitigation.</li> <li>• <u>Link 206, 186, 171 - Middleton Road, Bucknell</u> – Severance / NMU Delay – a <b>slight temporary adverse (not significant)</b> residual effect with additional mitigation in the form of the embedded Highway Works at Middleton Road bridge over the M40 brought forward from Phase 2 to Phase 1, in combination with changes to the speed limit on Middleton Road and Ardley Road from derestricted to 40mph.</li> </ul> <p>In terms of access to open space, the OxSRFI scheme will provide increased opportunities for walking/cycling/horse-riders. These are positive effects with regarding to human health outcomes, providing permanent beneficial health impacts.</p>
<p>Air Quality and Odour – Chapter 4</p>	<p><b><u>Construction phase:</u></b>  <u>Dust Emissions</u>          With the implementation of the embedded mitigation measures, emissions from construction activities will be reduced, and the residual impact is expected to be <b>negligible, which is not significant.</b></p> <p><u>Construction Phase Road Traffic Emissions</u>          Road traffic emissions during the construction phase are anticipated to have a Negligible effect on local air quality at human receptors. With the inclusion of mitigation measures listed in the CEMP (ES Appendix 2.3), the residual effects will remain <b>negligible, which is not significant.</b></p> <p>The construction phase of the Proposed Development is not expected to result in the non-compliance of the South East non-agglomeration zone (UK0031).</p>

	<p><u>Construction Phase Odour Emissions</u>          With the implementation of the proposed mitigation measures including the additional mitigation secured via an Odour Management Plan (OMP), it is anticipated that the residual effect of odours from the landfill reprofiling, which is temporary in nature, should be <b>'not significant'</b>.</p> <p>It is anticipated that there will be <b>no residual or ongoing odour impacts</b> following the completion of the landfill reprofiling process.</p> <p><b><u>Operation phase:</u></b>  <u>Road traffic emissions</u>          Road traffic emissions during the operational phase are anticipated to have a <b>negligible to moderately beneficial effect</b> on NO2 and PM10 concentrations at human receptors. Impacts on PM2.5 are anticipated to be Negligible until the implementation of the more stringent 10 µg.m-3 AQS, after which they become more adverse. These impacts are anticipated to be no worse than <b>minor adverse overall, which is not significant</b>.</p> <p>The operational phase of the Proposed Development is not expected to result in the non-compliance of the South East non-agglomeration zone (UK0031).</p> <p><u>Site Suitability</u>          The Proposed Development is not expected to result in the exposure of new, sensitive receptors to poor air quality. Therefore, air quality impacts on proposed receptors within the Main Site are considered to be <b>'negligible' and 'not significant'</b>.</p> <p><u>Rail Emissions</u>          It has been determined that the Proposed Development does not exceed the screening criteria for the requirement to assess rail emissions associated with rail locomotives. Therefore, impacts on local air quality from rail emissions as a result of the operational development are considered to be <b>'negligible' and 'not significant'</b>.</p>
<p>Noise and Vibration – Chapter 5</p>	<p><b><u>Construction phase:</u></b>          No significant effects from noise or vibration associated with the construction of the Proposed Development have been predicted.</p> <p>During construction, with the implementation of best practicable measures (BPM) through phase specific P-CEMPs (in accordance with ES Appendix 2.3) to identify specific mitigation measures, it is anticipated that temporary adverse effects from the works during the daytime work hours and potential night period working with respect to the Highway Works would occur less often and the resulting noise and vibration levels would be reduced compared to what is currently predicted. However, it is difficult to quantify the reduction that would be achieved at this stage of the development. Therefore, it is considered possible that although <b>some temporary adverse effects would remain</b>, though they will have been mitigated and minimised to comply with national policy.</p> <p><b><u>Operational phase:</u></b></p>

	<p>No significant adverse effects from noise or vibration associated with the operation of the Proposed Development have been predicted with respect to:</p> <ul style="list-style-type: none"> <li>• Railway noise or vibration from additional trains travelling on the Chiltern Main Line.</li> <li>• Operational noise from the Main Site at all receptors unless R28 (Ardley Fields Farm Cottages) is converted back to a residential receptor. Whilst some exceedances of the background sound levels are predicted at other receptors, the absolute levels are below the relevant threshold.</li> <li>• Daytime road traffic noise (all receptors).</li> <li>• Night-time road traffic noise at all receptors except T10 (Isis Avene, Bicester).</li> </ul> <p>Where potentially adverse operational noise effects are predicted, mitigation options have been considered where practicable to mitigate and minimise potential effects as per policy and guidance.</p> <p>The <b>only significant adverse effect identified, is with respect to night-time road traffic noise</b> at receptor T10 – this is a result of anticipated changes in traffic patterns on the improved road network following the OxSRFI mitigation (re-assigned traffic effects). At receptor T10 there is a chance that the measures being taken by Oxfordshire County Council (OCC) under the Local Transport Connectivity Plan may reduce the magnitude of this effect which, in combination with the Framework Travel Plan (ES Appendix 3.2), may avoid the significant adverse effect, however this is not certain. The only practicable option for mitigation is the provision of enhanced sound insulation to affected bedrooms (i.e., enhanced glazing and an alternative means of ventilation) - this would be secured under the S106 Agreement, with an agreed sum made available to each eligible property for enhanced glazing (if required) and alternative ventilation for bedrooms only (as the effect is limited to the night time period). At properties within receptor T10 where this mitigation is employed, the significant adverse effect would be avoided. However, it would be down to the occupants to decide whether or not to take up the offer and install the proposed mitigation. Significant adverse effects could remain at any properties which do not install the proposed mitigation.</p> <p>The Highway Works associated with the Proposed Development have been designed to mitigate and minimise any adverse effects and have contributed to beneficial effects for several receptors particularly in Ardley and Middleton Stoney.</p> <p>Note that the significant adverse effects that might arise at R28 would only occur if this receptor was returned to residential use, as its currently used as an office which has a lower sensitivity and is not expected to be occupied at night.</p>
<p>Ecology including Arboriculture – Chapter 6</p>	<p><b>Construction phase:</b>  Overall, whilst there will be extensive habitat loss from the Application Site during construction, adherence to appropriate precautionary working procedures (embedded CEMP (ES Appendix 2.3) and Natural England licences) and the phased creation of green infrastructure as part of each construction phase will maintain most important ecological faunal species and assemblages present locally, with residual effects ranging from <b>temporary/permanent not significant adverse to not significant beneficial</b></p>

	<p>for most faunal groups. Potentially significant adverse effects are reduced through construction practices or design, for example to the design of culvert structured over watercourses (including the Gagle Brook) to reduce or avoid the effects on habitats and species, and overall the majority of construction phase effects are likely to be neutral, with a number of likely residual beneficial effects as a result of CEMP (ES Appendix 2.3) or Habitat Management and Monitoring Plan (HMMP) (ES Appendix 6.11) measures implemented during and throughout the construction phase.</p> <p><b><u>Operational phase:</u></b>          Notably for the operational stage, with implementation of the proposed mitigation, <b>all unavoidable residual adverse effects will be reduced to below significant levels</b>. Through retention of existing habitats and features where possible as part of the embedded design, effects are minimised as far as possible. Also, with integrated habitat enhancement and creation as part of the significant Green Infrastructure the Proposed Development will deliver Biodiversity Net Gain (BNG) in excess of 10%.</p> <p>However, as is typical for a development of this kind and scale, it is anticipated that there would be <b>some likely residual adverse impacts</b>. These residual adverse effects include on local designated sites including the Ardley Cutting and Quarry SSSI as a result of increased traffic journeys within the immediate area, but these are localised effects and generally low magnitude impacts to airborne pollution deposition rates and are not considered significant in EIA terms. These effects should furthermore be viewed within the context of the operational OxSRFI replacing a significant quantity of road-based freight with rail-based freight and therefore directly benefiting road congestion and associated transport related air pollution across the wider network. In addition, the proposed mitigation measures are expected to deliver likely <b>significant benefits</b> for calcareous grassland (Important Ecological Features (IEF) of National importance), Great Crested Newts (GCN) and invertebrates, including several of the priority butterfly species listed within the Ardley Cutting and Quarry SSSI citation.</p> <p>As is typical for a development of this kind, it is anticipated that there would be some permanent loss of habitats utilised by priority fauna such as arable and open grassland that support farmland bird assemblages, resulting in some temporary adverse effects as a result of this change. However, it is notable that the Proposed Development will provide permanent and wide-ranging residual benefits for most resident bird assemblages and also for other notable species confirmed present locally or are potentially present within the local area. Overall, the design will maintain and improve upon the conservation status of notable habitats, and will maintain, and where possible provide local level enhancement for priority faunal species and assemblages in accordance with the requirements of national and local planning policy.</p>
<p>Landscape and Visual Impact Assessment – Chapter 7</p>	<p><b><u>Construction phase:</u></b>  <u>Visual:</u></p> <ul style="list-style-type: none"> <li>• Effect upon landscape character (day-time and night-time) of the site and its immediate context: Main Site and M40 J10 Highway Improvements</li> </ul>

	<ul style="list-style-type: none"><li>• Effect upon Site Landscape Features: Land cover; Local landform; and Woodland, trees, hedgerow and other planting</li></ul> <p><u>Landscape:</u></p> <p>Residents/ properties at;</p> <ul style="list-style-type: none"><li>• Ardley (southern; eastern and northern sides/ edges)</li><li>• Heyford Park (limited number; eastern edge only; including Duvall Park homes)</li><li>• Manor Farm, Manor Farm Cottages, Dewars Farm and Bucknell Lodge; and</li><li>• Middleton Stoney (limited number; eastern edge).</li></ul> <p>Users of stretches of Public Rights of Way (PROW) at;</p> <ul style="list-style-type: none"><li>• Ardley (south, east and north of the settlement);</li><li>• Baynards Green;</li><li>• North and south of Heyford Park/ Airfield;</li><li>• East of B430/ ERF/ north of Dewars Farm;</li><li>• Middleton Stoney (north and south east);</li><li>• Main Site.</li></ul> <p>Users of stretches of Roads at;</p> <ul style="list-style-type: none"><li>• B430 (between Ardley and Middleton Stoney) north and south of the rail bridge crossing) (Refs: VA and VB);</li><li>• Ardley Road (east and west of M40) (Ref: VD);</li><li>• Somerton Road/ Ardley Road (west of Ardley) (Ref: VH);</li><li>• B4030 (North west and east of Middleton Stoney) (Refs: VJ and VK)</li></ul> <p>Consideration of the likely residual effects appraises the Proposed Development 15 years after completion and takes into account the growth and management of the proposed and conserved planting over this time. These residual effects are detailed in the Landscape and Visual Effects Tables at ES Appendices 7.2 and 7.3.</p> <p><b><u>Residual Landscape Effects:</u></b></p> <p>In general, the landscape effects of the Proposed Development will reduce over time following the establishment and subsequent maturing of the proposed planting and habitats. The comprehensive management of not only the proposed planting and habitats but also the existing conserved trees and hedgerows within the Main Site will also assist in reducing the initial landscape effects over time.</p>
--	--

	<p>The main residual changes in landscape terms will arise from the maturing and management of the outer and perimeter landscape and planting proposals, which will assist in mitigating the influence of the Proposed Development on the Main Site`s immediate and wider landscape context and in assimilating the built development proposals. The proposed woodland, tree, scrub and other planting proposals will establish and mature to form a robust and connected perimeter landscape and will include valuable biodiversity, public access routes and informal recreation benefits.</p> <p>The influence of the Proposed Development upon the surrounding landscape will reduce over time with the maturing of the planting proposals, yet it will nevertheless remain visible and a major feature and notable influence within the local landscape. The residual landscape effect of the Proposed Development after 15 years for the published landscape types and character areas will be <b>minor adverse or minor/ moderate adverse</b>.</p> <p>The residual landscape effect of the Proposed Development after 15 years on the Main Site and its immediate context will be <b>moderate adverse</b>. At the scale of the Main Site and immediate context, for the M40 J10 Highway Improvements and Ardley Bypass, the residual landscape effect of the Proposed Development after 15 years will be <b>minor/ moderate adverse</b> and for the M40 J9 Highway Improvements the residual landscape effect will be <b>minor adverse/ negligible</b>.</p> <p><b><u>Residual Visual Effects:</u></b>  The majority of the visual effects of the Proposed Development will reduce over time following the establishment and subsequent maturing of the proposed planting and habitats. The maturing and management of the existing and extensive new woodland, trees and other planting will offer noticeable visual improvements and mitigation for the majority of the surrounding settlement/ properties, PROW and other visual receptors.</p> <p>The residual visual effects of the Proposed Development after 15 years will generally <b>range up to moderate adverse</b>, subject to the extent of the available views. The only likely residual significant adverse visual effect is on users of stretches of Public Rights of Way (PROW) at the <b>Main Site</b> (Ref: FL).</p>
<p>Lighting –  Chapter 8</p>	<p><b><u>Construction phase:</u></b>  The residual effects associated with the Proposed Development at the construction phase can be assessed based upon the implementation of the embedded mitigation measures and the Construction Environmental Management Plan (CEMP) (ES Appendix 2.3).</p> <p>There are <b>no likely residual significant effects of lighting</b> on the identified receptors. There will also <b>not be breaches of E2 environmental zone</b> obtrusive light limits on identified human receptors.</p> <p><b><u>Operational phase:</u></b>  The residual effects associated with the Proposed Development at the operational phase can be assessed based upon the implementation of the</p>

	<p>embedded mitigation measures and the associated Outline Lighting Strategy provided as ES Appendix 8.1.</p> <p>There are <b>no likely residual significant effects of lighting</b> on the identified receptors. There will also <b>not be breaches of E2 environmental zone</b> obtrusive light limits on identified human receptors.</p>
<p>Water Environment – Chapter 9</p>	<p><b>Construction phase:</b>  Adherence to the CEMP (ES Appendix 2.3) will ensure that there are only <b>negligible effects</b> of the Proposed Development on all receptors during the construction phase, resulting in a <b>neutral or slight significance</b>.</p> <p><b>Operational phase:</b>  Any potential effects likely to arise as part of the operational phase would be neutral or slight in nature with mitigation (embedded and additional) implemented as part of the Proposed Development. The range of mitigation measures proposed will ensure <b>there are only up to (i.e. no more significant than) negligible effects</b> of the Proposed Development on all receptors during the operation phase.</p> <p>There will be <b>slight beneficial effects</b> in the form of a reduced risk of flooding within the Main Site in more extreme events because of the realignment of the drainage channels and the reduced rates of discharge from the Main Site into local watercourses and as a result of the proposed drainage strategy. The two stage channel on the Padbury Brook Tributary will also provide slight beneficial effects in the form of a reduced risk of flooding to the existing railway.</p> <p>There will also be <b>slight beneficial effects</b> to water quality due to the change from agricultural use which is currently a key issue preventing the Langford Brook (Bicester to Ray, including Gagle Brook) and Padbury Brook catchments reaching Good Water Framework Directive (WFD) status.</p>
<p>Heritage – Built and Archaeology – Chapter 10</p>	<p><b>Archaeology:</b>  The mitigation – in the form of a programme of archaeological excavation, recording, analysis, reporting and publication – for the loss of the identified archaeological resources within the Application Site that would be subject to physical effects, would serve to realise much of the research potential and provide potential enhancements in understanding that is inherent in many archaeological remains. This would not completely mitigate the loss of these resources, but would nonetheless serve to reduce the significance of residual effect from <b>moderate adverse to minor adverse</b> for receptors:</p> <ul style="list-style-type: none"> <li>• AR3 – Iron Age and Roman ditches and Roman stone structure</li> <li>• AR6 – Iron Age banjo enclosure</li> <li>• AR8 - Iron Age ditches and Roman settlement including Roman structure</li> <li>• AR9 – Early Medieval pit, possible Sunken Featured Building</li> <li>• AR10 – Iron Age banjo enclosures</li> <li>• AR11 – Iron Age possible banjo enclosure</li> </ul> <p>With <b>minor adverse to negligible</b> for receptors:</p>

	<ul style="list-style-type: none"> <li>• AR1 – Iron Age, Roman and Undated linear features and former field boundaries</li> <li>• AR2 – Iron Age and Roman ditches</li> <li>• AR4 – Post Medieval agricultural structure</li> <li>• AR5 – Roman enclosures</li> <li>• AR7 – Iron Age enclosure and cremations</li> <li>• AR13 – Roman cremations and inhumation</li> </ul> <p>Therefore, while the excavation, recording and reporting would not completely mitigate the loss of the remains, it would ensure that the resulting residual effects would <b>not be significant</b>.</p> <p><b><u>Built heritage</u></b>  The Proposed Development incorporates a number of primary embedded mitigation measures. The residual effects of the Proposed Development on receptors BHR1 – BHR8 are summarised below, however, and for the avoidance of doubt, it should be noted that these effects are not significant.</p> <p><b>Minor adverse</b> for receptors:</p> <ul style="list-style-type: none"> <li>• BHR1 – Barn approximately 30m north of Ashgrove Farmhouse (Grade II Listed Building)</li> <li>• BHR5 – Lodge Farmhouse (Grade II Listed Building)</li> <li>• BHR7 – Ardley Conservation Area</li> <li>• BHR8 – RAF Upper Heyford Conservation Area</li> </ul> <p><b>Negligible adverse:</b></p> <ul style="list-style-type: none"> <li>• BHR2 – Ashgrove Farm (non-designated heritage asset)</li> <li>• BHR4 – Troy Farmhouse (Grade II Listed Building)</li> <li>• BHR6 – Middleton Park (Grade II Registered Park and Garden)</li> <li>• SM1 – Scheduled Cold War Structures at the former Upper Heyford Airbase</li> </ul> <p><b>No impact:</b></p> <ul style="list-style-type: none"> <li>• BHR3 – Trow Pool Water Tower (Grade II Listed Building)</li> </ul> <p>The effects identified above would all fall within <b>less than substantial harm</b> as categorised by the NPS (and NPPF).</p>
<p>Ground Conditions – Chapter 11</p>	<p><u>A summary of the residual effects during both the construction and operational phases are set out below in respect of ground conditions.</u> For the avoidance of doubt, it should be noted that these residual effects are not significant.</p> <p><b><u>Construction phase:</u></b>  <u>Human Health</u>  The implementation of a Remediation Strategy and asbestos surveys / removal from buildings and adherence to industry guidance documentation during construction will leave a <b>negligible residual effect</b>.</p> <p><u>Risks to Controlled Waters</u></p>

<p>Treatment / removal of any significant localised contamination will adhere to a Remediation Strategy and/or Environmental Permit conditions accordingly. Therefore, the residual effect will be <b>negligible</b>.</p> <p>By installing any piled foundations in accordance with an Environment Agency (EA) approved Foundation Works Risk Assessment the residual effect on the underlying Principal Aquifer will be <b>negligible</b>.</p> <p><u>Risks to Geology, Buildings and Structures</u> By retaining mineral resources on site and ensuring that additional demand is not put on external resources that can be sourced on site there will be <b>minor adverse effect on</b> loss of mineral resources.</p> <p>By implementing the contingency measures presented in ES Appendix 11.9, there will be a <b>negligible effect</b> on any fossils/artefacts associated with the Jurassic Rock geology.</p> <p><b><u>Operational phase:</u></b> <u>Human Health</u> Implementation of a comprehensive remediation strategy will remove any unacceptable risk to future site users. The residual effect will be <b>negligible</b>.</p> <p>Following the implementation of gas protection, any effects are unlikely to occur with the <b>residual effect negligible</b>.</p> <p>There will be a <b>residual small increased potential</b> for direct human exposure to potential contamination identified in shallow soils through ingestion, direct contact or inhalation of contaminated soil. Adequate standard personal protective equipment and the development of basic hygiene measures (following relevant guidance from 'HSE 66 Protection of Workers and the General Public' referred to above) for on-site estate management or other on-site workers (such as landscapers or gardeners), coupled with implementation of an agreed remediation strategy will remove any unacceptable or significant risks to future site users. The residual effect will be <b>negligible</b>.</p> <p>The mitigation measures for the remodelled Ardley Landfill will result in an <b>overall effect of negligible significance</b>.</p> <p><u>Risks to Controlled Waters</u> The predominantly hard standing cover which will be present during the operational phase will minimise the infiltration of rainfall and recharge through the unsaturated zone, thereby minimising potential contaminant mobility and reducing the risk to the underlying aquifer. The residual effect will be <b>negligible</b>.</p> <p>The construction of the OxSRFI will have a minor effect on the groundwater regime flow pattern but is not expected to affect the wider catchment. The residual effect will be <b>minor adverse</b>.</p> <p><u>Geology, Buildings and Structures</u> Detailed foundation design, and the associated methodology remains subject to detailed intrusive ground investigations for final geotechnical design, to be</p>
---

	<p>undertaken at the appropriate time (post consent) once detailed engineering designs are sufficiently developed. Implementing appropriate geotechnical design would mean it is unlikely that an adverse effect would occur and <b>would have an overall negligible effect.</b></p>
<p>Socio-Economics – including Health – Chapter 12</p>	<p>The OxSRFI scheme will deliver several significant socio-economic benefits. These include:</p> <ul style="list-style-type: none"> <li>• Employment – during the construction phase the OxSRFI would on average support 790 jobs each year. Once operational, the OxSRFI scheme has the potential to support around 9,607 gross direct FTE jobs on-site (around 7,195 net). It is also estimated that the OxSRFI scheme would support a further 3,600 FTE jobs in the sub-regional economy.</li> <li>• Local economy – it is estimated that based on the gross, direct FTE jobs (9,607 FTEs), the OxSRFI scheme could generate around £482.3m in GVA per annum.</li> <li>• Business rates – based on the proposed quantity of warehouse floorspace, the OxSRFI scheme will generate in the region of £21.9m in business rates per annum.</li> <li>• Health and wellbeing – the OxSRFI scheme will provide access to open space and nature through green infrastructure proposals, with access to active travel through footpath and cycleway connections.</li> </ul> <p>A summary of the residual effects is set out below:</p> <ul style="list-style-type: none"> <li>• Construction jobs – <b>minor beneficial</b></li> <li>• On-site jobs – <b>major beneficial (significant)</b></li> <li>• Labour market – <b>major beneficial (significant)</b></li> <li>• Off-site jobs – <b>minor beneficial</b></li> <li>• Local economy – <b>major beneficial (significant)</b></li> <li>• Housing – <b>negligible</b></li> <li>• Deprivation – <b>minor beneficial</b></li> <li>• Health and Wellbeing – <b>moderate beneficial (significant)</b></li> </ul>
<p>Materials and Waste – Chapter 13</p>	<p><b>Construction phase:</b> With the embedded mitigation in place, there are no additional mitigation measures proposed. A summary of the effects is set out below:</p> <ul style="list-style-type: none"> <li>• Demolition – disposal of demolition waste – negligible magnitude with a slight significance</li> <li>• Demolition – disposal of asbestos from demolition works – negligible magnitude with a slight significance</li> <li>• Site preparation earthworks - Excavation and filling using site won materials, disposal of unsuitable material – negligible magnitude with a slight significance</li> <li>• Construction – construction waste – negligible magnitude with a slight significance</li> <li>• Construction – Use of quarried aggregate for construction (concrete, sub base, road surfacing) – negligible magnitude with a slight significance</li> </ul> <p><b>Operational phase:</b></p>

	<p>With the embedded mitigation in place – which includes an assumption that the recycling rates would be 65%, as required by regulation – there are no additional mitigation measures proposed.</p> <p>In terms of operations of the OxSRFI scheme, no manufacturing or processing is expected but there is potential for repackaging to occur. The effects from the OxSRFI scheme would be <b>negligible</b> with a slight significance.</p>
<p>Soil Resources and Agricultural Land – Chapter 14</p>	<p><b><u>Agricultural land:</u></b> The loss of agricultural land to built development cannot be mitigated. The residual effects of the Proposed Development are <b>major adverse (significant)</b> on agricultural land.</p> <p><b><u>Soil resources:</u></b> Following the adoption of the embedded mitigation measures during the construction process as described above, the Proposed Development represents a <b>minor adverse to negligible (non-significant)</b> residual effect on soil resources.</p>
<p>Climate Change – Chapter 15</p>	<p><b><u>Construction phase:</u></b> The magnitude of impact of the Proposed Development is assessed to be 334,139 tCO<sub>2</sub>e and the sensitivity of the receptor is high (given the severe consequence of global climate change and the cumulative contributions of all GHG emissions sources). The magnitude of the impact has been considered within the context of the UK Carbon Budget. The magnitude of emissions comprises 0.011% and 0.015% of the Fifth and Sixth UK Carbon Budgets.</p> <p>The total magnitude of emissions has been calculated to enable a 44% emissions reduction, compared to the magnitude of emissions presented in the assessment of likely significant effects (see Table 15.7 of ES Chapter 15 (Climate Change)). The full extent of additional mitigation measures has not been quantified across the Proposed Development, as such it can be expected that magnitude of emissions presented can be further reduced. It is considered that the additional emissions reduction measures align with national policy regarding decarbonisation and align with the UK's net zero trajectory.</p> <p>Considering the quantifiable and unquantifiable emissions reductions, the magnitude of emissions in the context of national carbon budgets, proposed additional mitigation set out above, alignment with net zero-aligned benchmarks, and alignment with local and national policy, the magnitude of impact of the Proposed Development on the high sensitivity receptor would result in a <b>minor adverse</b> effect, which is <b>not significant</b>.</p> <p><b><u>Operational phase:</u></b> The magnitude of impact is assessed to be 140,907 tCO<sub>2</sub>e per annum, or 8,454,422 tCO<sub>2</sub>e over the assessment lifetime. The sensitivity of the receptor is high. The magnitude of emissions comprises 0.04% of the Sixth UK Carbon Budget.</p>

	<p>The total operational emissions have been calculated to result in a 3% reduction compared to the emissions presented in the assessment of likely significant effects. These reductions arise from the following measures:</p> <ul style="list-style-type: none"> <li>• Consideration of Framework Travel Plan;</li> <li>• Consideration of the Applicant’s previous developments, to inform a more representative bill of quantities for the Main Site buildings rather than utilising Carbon Heroes Benchmarks (2023).</li> </ul> <p>Considering the emissions reductions, the magnitude of emissions in the context of national carbon budgets, proposed mitigation measures, and alignment with national policy, the magnitude of impact of Main Site and the Highways Works on the high sensitivity receptor would result in a <b>minor adverse</b> effect, which is <b>not significant</b>.</p>
<p>Cumulative Effects – Chapter 16</p>	<p>The assessment of cumulative effects considers both ‘<b>intra-project</b>’ (more than one likely effect by the Proposed Development on individual receptors, and considers representative receptors which will likely be most affected by the Proposed Development), and ‘<b>inter-project</b>’ effects (likely effects by the Proposed Development in combination with one or more other committed development site. In assessing the inter-project impacts ‘<i>reasonably foreseeable</i>’ sites and proposals are considered, with the list of sites used informed by dialogue with the Council (and the earlier ES Scoping process). Chapter 16 draws on the conclusions and judgements provided in the relevant topic specific chapters.</p> <p>Some aspects of the ES are inherently cumulative – crucially this includes the Transport Assessment (TA, ES Appendix 3.1) which has assessed and modelled the traffic expected from the Proposed Development with an extensive list of planned and committed sites (as agreed with the Transport Working Group). The assessments of Air Quality, and Noise, also include data from that TA modelling to assess likely impacts of road traffic.</p> <p>In terms of likely intra-project cumulative effects, no additional likely significant effects are identified on any receptors from considering the likely effects in combination.</p> <p>In terms of inter-project cumulative effects, the assessment confirms that a number of residual <b>likely significant cumulative effects</b> are anticipated from the Proposed Development with other sites, albeit these are primarily from sites currently proposed but not approved. These are summarised in Chapter 16 as:</p> <ul style="list-style-type: none"> <li>- Transport: Significant Beneficial, Operational stage</li> <li>- Landscape (localised, site and immediate context): Significant Adverse, Construction and Operational stage.</li> <li>- Visual: Significant Adverse, Construction and Operational stage</li> <li>- Socio-Economic: Significant Beneficial, Operational stage</li> <li>- Agricultural Land: Significant Adverse, Construction stage.</li> </ul>

## 17.3 CONCLUSIONS

- 16.3.1 The OxSRFI scheme incorporates a range of design and environmental measures which will help retain and enhance existing habitats and deliver a successful high-quality scheme.
- 16.3.2 The design of the proposals responds to the Application Site's context and environment and to the results of extensive surveys and appraisals. This process has ensured that the potential for any adverse environmental effects has been minimised and that the opportunities for environmental benefits are maximised.
- 16.3.3 As set out in Table 17.1, the ES demonstrates that a thorough assessment of all the relevant environmental issues and likely impacts has been undertaken, and suggests that there would only be **significant adverse** residual environmental effects from the Proposed Development on the following receptors:
- Noise and Vibration – receptor R28 (Ardley Fields Farm Cottages) – in respect of operational noise from the Main Site but only if the property, which is currently in use as an office, is converted back to residential use.
  - Visual – localised effects on users of PROW within the site.
  - Soil Resources and Agricultural Land – the loss of agricultural land to built development.
  - Cumulatively - the Proposed Development is likely to have some significant residual effects in combination with one or more other committed or proposed development site, including some localised significant visual effects, and loss of agricultural land, but also significant cumulative transport and socio-economic benefits.
- 16.3.4 It is acknowledged that there are also lesser adverse residual environmental effects from the Proposed Development, which are not significant, and which are described throughout the ES chapters and summarised above.
- 16.3.5 A range of likely benefits will be delivered by the OxSRFI scheme which include some that have been assessed as significant. Some of the beneficial effects are:
- Transport – several highways improvements at roads within the vicinity of the Main Site which reduce driving delay at junctions, improve

severance / NMU Amenity / Fear and Intimidation. Some significant beneficial effects are likely as a result of the highways improvements.

- Ecology including Arboriculture – proposed mitigation in respect of calcareous grassland (IEF of National importance), GCN and invertebrates, including several of the priority butterfly species listed within the Ardley Cutting and Quarry SSSI citation. Some significant beneficial effects are likely as a result of the proposed mitigation.
- Water Environment – reduced risk to flood on the Main Site, and improvements in water quality through measures included in the drainage system.
- Socio-Economic and Health – benefits in the form of new employment opportunities, investment in the local economy (i.e., the GVA per annum), business rate, improved opportunities for health and wellbeing, including active travel. Some significant beneficial effects are likely, including employment opportunities and GVA.

16.3.6 The ES provides a sound basis for an assessment of likely effects from the Proposed Development.