

**A38 Derby Junctions**

**TR010022**

**Volume 6**

**6.3 Environmental Statement  
Appendices**

**Appendix 6.1: Derwent Valley Mills  
World Heritage Site - Heritage Impact  
Assessment**

Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed  
Forms and Procedure) Regulations 2009

April 2019

## Infrastructure Planning

### Planning Act 2008

#### **The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009**

### A38 Derby Junctions Development Consent Order 202[ ]

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## **6.3 Environmental Statement Appendices**

### **Appendix 6.1: Derwent Valley Mills World Heritage Site - Heritage Impact Assessment**

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# **A38 Derby Junctions**

## **Derwent Valley Mills World Heritage Site - Heritage Impact Assessment**

**Report Number: HE514503-ACM-EHR-A38\_SW\_PR\_ZZ-RP-LH-0002 P03 S4  
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## NON-TECHNICAL SUMMARY

This Heritage Impact Assessment (HIA) considers the potential effect of the A38 Derby Junctions scheme (herein referred to as 'the Scheme') on the Derwent Valley Mills World Heritage Site (WHS). The assessment concentrates on potential effects associated with Little Eaton junction which passes through the World Heritage property. A separate Environmental Statement (ES) has been prepared which considers the wider environmental effects of the Scheme as a whole, including those on heritage assets outside the WHS. The HIA should be read in parallel with the ES.

This document takes into consideration current legislative and planning context in relation to the Derwent Valley Mills WHS, including international, national and local policies. In particular it takes into consideration the existing Management Plan for the WHS. This sets out the Attributes of the Derwent Valley Mills WHS which contribute to its Outstanding Universal Value (OUV). This HIA considers how the Scheme affects the OUV of the Derwent Valley Mills WHS.

The Derwent Valley Mills WHS has been designated due to its role in the development of the Industrial Revolution. A number of elements from this period survive, including standing buildings and historic landscape features. The Scheme area does not contain any of the Key Properties of the WHS.

The Scheme involves changes to the existing A38, including changes to Kingsway junction, Markeaton junction and Little Eaton junction. The proposed Little Eaton junction lies within the WHS property, with the Darley Abbey Conservation Area, and associated listed buildings, and Allestree Hall and Registered Park and Garden located nearby. The Scheme has the potential to cause physical impacts to the WHS through alterations to the historic landscape, and impacts on setting of associated heritage assets. These have been minimised as much as possible through the Scheme design process (details are provided herein).

The effect of the Scheme on the overall OUV of the Derwent Valley WHS, taking into account the mitigation measures embedded within the Scheme design and that the Scheme is concerned with a small section of the overall WHS, is assessed as Slight adverse (i.e. no more than a Negligible impact upon an asset of Very High value). The Scheme is, therefore, considered to align with the aims and policies outlined in the WHS Management Plan. It also aligns with national planning policy set out within the National Planning Statement for National Networks (NPSNN) and the National Planning Policy Framework (NPPF).

# 1 INTRODUCTION

## 1.1 Introduction

- 1.1.1 This report is the Heritage Impact Assessment (HIA) for the Derwent Valley Mills World Heritage Site (WHS No. 1030; inscribed 2001) located in Derbyshire, England, UK. This HIA has been prepared in relation to the A38 Derby Junctions scheme (referred to as 'the Scheme' herein), which would pass through the World Heritage property at Little Eaton junction.
- 1.1.2 Highways England is proposing improvements to three at-grade junctions on the A38 near Derby, namely Kingsway junction, Markeaton junction and Little Eaton junction (refer to Figure 1), as part of its Road Investment Strategy (RIS) funded by the UK Government. The development of the Scheme design has benefited from public consultation and consultation with statutory consultees.

**Figure 1: A38 Derby junctions – location plan**



- 1.1.3 This HIA has been prepared by AECOM on behalf of Highways England to support the Development Consent Order (DCO) application for the Scheme.
- 1.1.4 The HIA has been prepared in tandem with the development of the Scheme design to inform the road improvement proposals. This has enabled the development of a Scheme design which aims to protect the Outstanding Universal Value (OUV) of the WHS. The HIA only addresses Scheme impacts on the WHS at Little Eaton junction, thus for the purposes of this HIA, the Scheme is considered to be proposed works at Little Eaton junction only.
- 1.1.5 A statutory Environmental Statement (ES) has been prepared for the Scheme in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (HMSO, 2017) (as amended 2018), and guidance set out in the Highways England's Design Manual for Roads and Bridges (DMRB), Volume 11, Environmental Assessment (Highways Agency, 2007). This HIA should be read in conjunction with the ES.

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## **1.2 Purpose of the HIA**

- 1.2.1 The purpose of the HIA is to evaluate effectively the impact of the Scheme on the OUVs of the Derwent Valley Mills WHS.
- 1.2.2 Major highways schemes in England pass through a series of design and assessment stages, including statutory ES, prior to a DCO application under the terms of the Planning Act 2008 (HMSO 2008). These processes include full and detailed consideration of the historic environment, including World Heritage properties.
- 1.2.3 This HIA has been undertaken alongside the statutory EIA as part of the Scheme design process. The ES cultural heritage chapter (Chapter 6) is the primary document which reports the Scheme impacts and effects upon all designated and non-designated heritage assets, including the Derwent Valley Mills WHS, affected by the Scheme. HIA is undertaken for cultural World Heritage properties to evaluate the impact of potential development upon their OUV, to evaluate the potential impacts of the Scheme upon Integrity and Authenticity and to inform Scheme design and mitigation. Thus, the purpose of this HIA is to assess the potential negative and positive impacts of the Scheme upon the Derwent Valley Mills WHS, in accordance with ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (ICOMOS, 2011). The HIA addresses both designated and non-designated heritage assets relevant to the OUV of the WHS. It deals only with impacts on OUV and does not examine impacts on other designated or non-designated heritage assets that do not contribute to OUV as defined in the Statement of Outstanding Universal Value, Integrity and Authenticity (SoOUV).
- 1.2.4 The key findings of this HIA are reported and summarised in the ES (Chapter 6: Cultural Heritage). This HIA report is a standalone technical appendix to the ES (Appendix 6.1). The preparation of the ES and HIA has been coordinated closely. Both reports draw upon the same historic environment datasets, baseline and should thus be read in parallel.

## **1.3 Relationship between HIA and Environmental Statement**

- 1.3.1 The ES is the primary document which reports the Scheme impacts and effects upon both designated and non-designated heritage assets, determining if there are likely significant effects on the historic environment. The ES assesses known and potential buried archaeological resources as well as historic landscape character and historic buildings, identifying the value of heritage assets and to what extent setting influences significance. This is undertaken in the context of relevant legislation and policy, including the National Policy Statement for National Networks (NPSNN) (DfT, 2014), National Planning Policy Framework (NPPF) (MHCLG, 2019) and DMRB guidance.
- 1.3.2 The ES describes in detail both inbuilt (embedded) design mitigation and specific mitigation measures designed to address significant effects. Where mitigation measures are an inherent part of the design, these are set out in Chapter 2: The Scheme and Chapter 6: Cultural Heritage.
- 1.3.3 The HIA takes a holistic approach to assessment and considers the long term implications of the Scheme for OUV. The ES, in contrast, focuses on the detail of the construction and operational stages of the Scheme and splits effects out into temporary and permanent effects. The ES assesses impacts and effects on a standard 15-year

scale common to other ES topics. This is a relatively short time span which is inappropriate to HIA, particularly given the antiquity of the remains. Although the ES and HIA are broadly aligned, scores may vary where the HIA scoring involves a judgement on the overall permanent impact on OUV in the long term.

1.3.4 The HIA aims to assess the potential negative and positive impacts of the Scheme on the OUV of the WHS. In contrast to the ES, the HIA addresses impacts on the WHS at Little Eaton junction only, not the full length of the Scheme. It addresses both designated and non-designated heritage assets relevant to OUV. The HIA deals only with impacts on OUV and does not examine impacts on other heritage assets that do not contribute to OUV as defined in the SoOUV.

1.3.5 Both the ES and HIA report the overall Scheme impacts and effects on OUV.

## **1.4 Stakeholders**

1.4.1 HIA stakeholders for the Scheme include:

- Historic England
- Derby City Council (DCiC)
- Erewash Borough Council (EBC)
- Derbyshire County Council (DCC)
- Derwent Valley Mills World Heritage Site Partnership

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## **2 PLANNING AND POLICY CONTEXT**

### **2.1 Introduction**

2.1.1 The HIA has been prepared in accordance with the following international, national and local planning documents.

### **2.2 Heritage planning and policy context**

2.2.1 International agreements include:

- The Convention Concerning the Protection of the World Cultural and Natural Heritage (UNESCO, 1972)
- The Framework Convention on the Value of Cultural Heritage for Society (Faro Convention, Council of Europe, 2005)
- The European Landscape Convention (Florence Convention, Council of Europe, 2000)
- The European Convention on the Protection of the Archaeological Heritage (Revised) (Valletta Convention, Council of Europe, 1992)
- Convention for the Protection of the Architectural Heritage of Europe (Granada Convention, Council of Europe, 1985)

2.2.2 National planning context:

- Planning (Listed Buildings and Conservation Areas) Act 1990 (HMSO, 1990)
- Ancient Monuments and Archaeological Areas Act 1979 (HMSO, 1979)
- National Policy Statement for National Networks (NPSNN) (DfT, 2014)
- National Planning Policy Framework (NPPF) (MHCLG, 2019)

2.2.3 Local Planning Policy Context:

- Derby City Local Plans Part 1 Core Strategy (2017), Core Principles: Heritage, CP20 – Historic Environment; Areas of Change: the River Derwent Corridor, AC7 – The River Derwent Corridor, AC8 – Our City Our River, AC9 – Derwent Valley Mills World Heritage Site, C10 Darley Abbey Mills (Derby City Council, 2017a)
- City of Derby Local Plan Review: Policies E18, E19, E21 and E22 (Derby City Council, 2017b)
- Erewash Borough Council Core Strategy: Policy 11 (Erewash Borough Council, 2014a)
- Erewash Borough Local Plan Saved Policies: Policy EV5, EV6, EV7, EV8 and EV9 (Erewash Borough Council, 2014b)

2.2.4 Planning Guidance:

- Planning Practice Guidance (PPG) (DCLG, 2014)
- Historic Environment Good Practice Advice in Planning Note 3. The Setting of Heritage Assets (Historic England, 2017)



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- Historic Environment Good Practice Advice in Planning Note 2. Managing Significance in Decision Taking in the Historic Environment (Historic England, 2015)

#### 2.2.5 Management of the WHS:

- Derwent Valley Mills World Heritage Site Management Plan 2014 - 2019

#### 2.2.6 International guidance:

- Operational Guidelines for the Implementation of the World Heritage Convention, WHC 17/01 (UNESCO, 2017)
- Guidance on HIAs for Cultural World Heritage Properties (ICOMOS, 2011)
- Principles of the Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas (ICOMOS, 2005)
- Principles of the Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (Australia ICOMOS, 2013)
- Principles of the Nara Document on Authenticity (ICOMOS, 2004)
- Principles of the Venice Charter (International Charter for the Conservation and Restoration of Monuments and Sites) (ICOMOS, 1964)
- Managing Cultural World Heritage (UNESCO, 2013)

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## 3 METHODOLOGY

### 3.1 Overview

- 3.1.1 The methodology used for this HIA has been agreed with Historic England, DCiC, DCC and EBC as part of a scoping exercise formalised through the preparation of an HIA Scoping Report (Highways England, 2018). The methodology presented in the HIA Scoping Report was based on ICOMOS guidance (ICOMOS, 2011). The HIA Scoping Report considered the SoOUV adopted by the World Heritage Committee in 2010, alongside the Attributes set out in the WHS Management Plan that express or convey that OUV (DCC, 2014). The Scheme was described in outline and the condition of the WHS was summarised. The HIA Scoping Report detailed the background to the Scheme and set out how alternatives had been considered.
- 3.1.2 This HIA uses baseline data prepared as part of the ES (Chapter 6: Cultural Heritage) as this provides a wider context for the WHS. This has been enhanced for the purposes of this HIA, to provide further details on the specific significance of the WHS, taking into consideration its OUV. The ES baseline was established through a desk-based review of existing sources of information, supported where appropriate by the use of field survey, following the guidance set out in the Highways England's DMRB (Volume 11, Section 3, Part 2); and the Chartered Institute for Archaeologists' Standard and Guidance for Historic Environment Desk-based Assessment (ClfA, 2014) and Standard and Guidance for Archaeological Field Evaluation (ClfA, 2014).

### 3.2 Data sources

- 3.2.1 The following sources of information have been reviewed and form the basis of the assessment for cultural heritage:
- National Heritage List for England (NHLE)
  - Historic England Archive
  - Derbyshire County Council Historic Environment Record, including the Derbyshire Historic Landscape Characterisation
  - Derby Records Office
  - Derby Local Studies Library
  - Derby Museum and Art Gallery
  - Heritage Gateway
  - LiDAR datasets (Little Eaton junction only)
  - Ground investigation reports. A Preliminary Sources Study produced by Highways England (2015) (refer to ES Appendix 10.3) and a Ground Investigation Report (Highways England, 2018) (refer to ES Appendix 10.1)
  - Derwent Valley Mills World Heritage Site Research Framework (Knight, 2016)
  - Updated Research Agenda and Strategy for the Historic Environment of the East Midlands (Knight et al., 2012)
  - Derwent Valley Mills World Heritage Site Management Plan 2014 - 2019 (DCC, 2014)

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### 3.3 Site visits

- 3.3.1 Where access could be obtained from the applicable landowners, heritage assets expressing the OUV of the WHS were visited as part of this assessment. Site visits were undertaken between February 2017 and August 2018. These were undertaken to:
- Assess the condition and integrity of the heritage assets.
  - Assess the setting of the heritage assets.
  - Identify viewpoints.
  - Assess how the Scheme impacts upon the heritage assets and their setting.
- 3.3.2 In cases where access to the precise site of the asset could not be obtained, these were viewed from adjacent land and public rights of way. This enabled all assets to be adequately observed, their current setting to be understood, and the impacts of the Scheme to be adequately assessed.

### 3.4 Assessment of setting

- 3.4.1 The setting of an asset can form an important part of its significance and changes to its setting have the potential to affect its significance. The NPPF defines the setting of a heritage asset as *'the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral'* (NPPF Annex 2: Glossary; MHCLG, 2019).
- 3.4.2 The Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas (ICOMOS, 2005) acknowledges the contribution of setting to the significance of heritage monuments, sites and areas, defining the setting of a heritage structure, site or area *'as the immediate and extended environment that is part of, or contributes to, its significance and distinctive character'*.
- 3.4.3 In accordance with the advice on Integrity in the Operational Guidelines (UNESCO, 2017), the setting assessment considers the *'Relationships and dynamic functions present in cultural landscapes, historic towns or other living properties essential to their distinctive character should also be maintained.'* (UNESCO 2017, para. 89).
- 3.4.4 The assessment of setting has been undertaken in accordance with the recommendations of *GPA3: The Setting of Heritage Assets* (Historic England, 2017). This document advocates a stepped approach to assessment, as follows:
- Step 1: Identify which heritage assets and their settings are affected.
  - Step 2: Assess the degree to which these settings make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated.
  - Step 3: Assess the effects of the proposed development, whether beneficial or harmful, on that significance or on the ability to appreciate it.
  - Step 4: Explore ways to maximise enhancement and avoid or minimise harm.
  - Step 5: Make and document the decision and monitor outcomes.

- 3.4.5 In assessing the setting and the contribution it makes to the significance of the heritage assets, this HIA considers both tangible and intangible values and visual and non-visual aspects of the setting of assets that express Attributes of OUV.

### **3.5 Attributes of OUV**

- 3.5.1 Attributes are a direct tangible expression of the OUV of the property (UNESCO, 2017). Attributes are defined in the SoOUV which was formally adopted by the World Heritage Committee in 2010 and are further explained in the 2014 WHS Management Plan. Taken together, the Attributes define the reasons for the OUV of the Derwent Valley Mills WHS.

### **3.6 Integrity and Authenticity**

- 3.6.1 The potential impact of the Scheme on the Integrity and Authenticity of the WHS are described in a narrative manner. Attributes are greater than individual components and include the characteristics which convey the values identified in the Statement of OUV.

#### **Integrity**

- 3.6.2 In relation to Integrity, the Operational Guidelines (UNESCO, 2017) state in paragraphs 88 and 89 that:

*'88. Integrity is a measure of the wholeness and intactness of the natural and / or cultural heritage and its Attributes. Examining the conditions of integrity therefore requires assessing the extent to which the property:*

*Includes all elements necessary to express its Outstanding Universal Value;*

*Is of adequate size to ensure the complete representation of the features and processes which convey the property's significance;*

*Suffers from adverse effects of development and / or neglect;*

*This should be presented in a statement of integrity.*

*89. For properties nominated under criteria (i) to (vi)<sup>1</sup>, the physical fabric of the property and / or its significant features should be in good condition, and the impact of deterioration processes controlled. A significant proportion of the elements necessary to convey the totality of the value conveyed by the property should be included. Relationships and dynamic functions present in cultural landscapes, historic towns or other living properties essential to their distinctive character should also be maintained.'*

- 3.6.3 These factors are taken into account when assessing the potential Scheme impact on the Integrity of the WHS.

#### **Authenticity**

- 3.6.4 Paragraph 82 of the 2016 Operational Guidelines for the Implementation of the World Heritage Convention (UNESCO, 2017) provides guidance on the types of factors that can usefully be considered when addressing the Authenticity of a WHS. This states that:

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<sup>1</sup> Paragraph 89 applies as the WHS was inscribed under Criteria (ii) and (iv).

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*‘Depending on the type of cultural heritage, and its cultural context, properties may be understood to meet the conditions of Authenticity if their cultural values (as recognized in the nomination criteria) are truthfully and credibly expressed through a variety of attributes including:*

*Form and design;*

*Materials and substance;*

*Use and function;*

*Traditions, techniques and management systems;*

*Location and setting;*

*Language, and other forms of intangible heritage;*

*Spirit and feeling; and*

*Other internal and external factors.’*

3.6.5 In relation to the Derwent Valley Mills WHS, the primary factors that express its Authenticity also relate to the Attributes of the OUV. These factors, as set out in the 2014 WHS Management Plan may be considered to relate to:

- Form and design: despite alterations the form of some industrial buildings are still intact and easy to discern.
- Materials and Substance: the materials used to construct industrial buildings and the structural techniques used.
- Location and setting: the relationship between the attributes and the rural landscape.

### **3.7 Scope of assessment**

3.7.1 In accordance with the ICOMOS Guidance (ICOMOS, 2011), the HIA involves the following key elements:

- a) Identification of heritage potentially at risk and its contribution to the OUV of the WHS.
- b) Identification of how change or development would impact on OUV, positively or negatively.
- c) Identification of how change or development would impact on Integrity and Authenticity, positively or negatively.
- d) Consideration of how adverse impacts of the Scheme might be mitigated.

3.7.2 The assessment includes the following elements:

- a) Assessment of potential impacts of the Scheme on heritage assets that convey the Attributes of OUV.
- b) Assessment of potential overall impacts on each of the Attributes of OUV of the WHS.
- c) A qualitative assessment of the likely impact of the Scheme on the fabric and setting of the designated and non-designated heritage assets that contributes to

OUV. This characterises the heritage resource and identifies assets that convey Attributes that express the OUV.

- 3.7.3 A narrative description of the impacts is presented, with a summary conclusion on the overall impact of the Scheme upon the Attributes of OUV of the WHS and its OUV, Integrity and Authenticity. The significance of effect is then assessed. This gives a balanced judgement of the importance of the change based on the value of the asset.
- 3.7.4 The alignment of the Scheme with the 2014 WHS Management Plan vision, aims and policies is also assessed.

### 3.8 Evaluation of heritage resource

- 3.8.1 The evaluation method used is that set out in Appendix 3a of the ICOMOS guidance (ICOMOS 2011). The value of heritage assets within the WHS is assessed in relation to statutory designations (international, national and local), but linked to the components identified in the SoOUV. Where necessary, qualitative assessments have been made using professional judgement to determine the value of the heritage resource. 'Whilst this method should be used as objectively as possible, qualitative assessment using professional judgement is inevitably involved' (ICOMOS 2011).
- 3.8.2 The value attributed to heritage assets is based on relevant legislation and policy (see HIA Section 2).
- 3.8.3 The values of the assets and attributes are defined using the following graded scale, in accordance with Table 3.1.

**Table 3.1: Method for the assessment of the value of heritage resources (based on ICOMOS 2011 appendix 3A: Example guide for assessing value of heritage assets)**

Value/ level of significance	Heritage attributes
Very High	<p>Sites, structures or landscapes of acknowledged international importance inscribed as a WH property. Individual attributes that convey OUV of the WH property. Assets that contribute significantly to acknowledged international research objectives.</p> <p>Landscapes of acknowledged international importance inscribed as a WH property. Individual attributes that convey OUV of the WH property. Historic landscapes of international value, whether designated or not. Extremely well-preserved historic landscapes with exceptional coherence, time-depth, or other critical factors.</p> <p>Associations with particular innovations, technical or scientific developments or movements of global significance. Associations with particular individuals of global importance.</p>

Value/ level of significance	Heritage attributes
High	<p>Scheduled monuments and non-designated assets of the quality and importance to be scheduled. Assets that can contribute significantly to acknowledged national research objectives.</p> <p>Grade I and II* listed buildings and Grade II listed buildings with exceptional qualities. Conservation Areas containing very Important buildings. Non-designated structures of clear national importance.</p> <p>Nationally-designated and non-designated historic landscapes of outstanding interest, high quality and national importance. Well-preserved historic landscapes with considerable coherence, time depth or other critical factors.</p> <p>Associations with particular innovations, technical or scientific developments or movements of national significance. Associations with particular individuals of national importance.</p>
Medium	<p>Designated or non-designated archaeological assets that can contribute significantly to regional research objectives.</p> <p>Grade II listed buildings and non-designated buildings that have exceptional qualities or historical associations. Conservation Areas containing buildings that contribute significantly to its historic character.</p> <p>Designated special historic landscapes. Non-designated historic landscapes that would justify special historic landscape designation. Landscapes of regional value. Averagely well preserved historic landscapes with reasonable coherence, time depth or other critical factors.</p> <p>Associations with particular innovations or developments of regional or local significance. Associations with particular individuals of regional importance.</p>
Low	<p>Designated or non-designated assets of local importance. Assets compromised by poor preservation and / or poor survival of contextual associations. Assets of limited value, but with potential to contribute to local research objectives.</p> <p>Locally listed buildings and historic (unlisted) buildings of modest quality in their fabric or historical associations.</p> <p>Robust non-designated historic landscapes. Historic landscapes with importance to local interest groups. Historic landscapes whose value is limited by poor preservation and / or poor survival of contextual associations.</p> <p>Associations with particular individuals of local importance. Poor survival of physical areas in which activities occur or are associated.</p>
Negligible	<p>Assets with little or no surviving archaeological interest.</p> <p>Buildings or urban landscapes of no architectural or historical merit; buildings of an intrusive character.</p> <p>Landscapes of little or no significant historical interest.</p> <p>Few associations or intangible cultural heritage vestiges surviving.</p>
Unknown	<p>The importance of the asset has not been ascertained.</p> <p>Buildings with some hidden (i.e. inaccessible) potential for historic significance.</p> <p>Little is known or recorded about the intangible cultural heritage of the area.</p>

### 3.9 Assessment of scale of specific impact and change

3.9.1 The scale of impact is assessed based on Guidance on HIAs for Cultural World Heritage Properties (ICOMOS, 2011, Appendix 3A). The scale or severity of impacts or changes (both adverse and beneficial) takes into account their direct and indirect effects and whether they are temporary or permanent, reversible or irreversible, transient, and related to visual, physical, social, cultural and economic aspects. The scale of impacts is assessed without regard to the value of the asset.

3.9.2 The cumulative effect of separate Scheme impacts is considered (see HIA Section 7).

3.9.3 The scale or severity of impact is ranked as:

- No change
- Negligible change
- Minor change
- Moderate change
- Major change (ICOMOS, 2011: para 5–7)

3.9.4 Table 3.2 sets out the method used for assessing the magnitude of impact.

**Table 3.2: Method for the assessment of the magnitude of impact upon heritage resources (based on ICOMOS, 2011 Appendix 3B: Example guide for assessing magnitude of impact)**

Impact grading	Heritage attributes
Major	<p>Changes to attributes that convey OUV of WH properties. Most or all key archaeological materials, including those that contribute to OUV such that the resource is totally altered. Comprehensive changes to setting.</p> <p>Change to key historic building elements that contribute to OUV such that the resource is totally altered. Comprehensive changes to the setting.</p> <p>Change to most or all key historic landscape elements, parcels or components; extreme visual effects; gross change of noise or change to sound quality; fundamental changes to use or access; resulting in total change to historic landscape character unit and loss of OUV.</p> <p>Major changes to area that affect the Intangible Cultural Heritage (ICH) activities or associations or visual links and cultural appreciation.</p>
Moderate	<p>Changes to many key archaeological materials, such that the resource is clearly modified. Considerable changes to setting that affect the character of the asset.</p> <p>Changes to many key historic building elements, such that the resource is significantly modified. Changes to the setting of an historic building, such that it is significantly modified.</p> <p>Change to many key historic landscape elements, parcels or components; visual change to many key aspects of the historic landscape; noticeable differences in noise or sound quality; considerable changes to use or access; resulting in moderate changes to historic landscape character.</p> <p>Considerable changes to area that affect the ICH activities or associations or visual links and cultural appreciation.</p>
Minor	<p>Changes to key archaeological materials, such that the resource is slightly altered. Slight changes to setting.</p> <p>Change to key historic building elements, such that the asset is slightly different. Change to setting of an historic building, such that it is noticeably changed.</p> <p>Change to few key historic landscape elements, parcels or components; slight visual changes to few key aspects of historic landscape; limited changes to noise levels or sound quality; slight changes to use or access; resulting in limited change to historic landscape character.</p> <p>Changes to area that affect the ICH activities or associations or visual links and cultural appreciation.</p>
Negligible	<p>Very minor changes to key archaeological materials, or setting.</p> <p>Slight changes to historic building elements or setting that hardly affect it.</p> <p>Very minor changes to key historic landscape elements, parcels or components; virtually unchanged visual effects; very slight changes in noise levels or sound quality; very slight changes to use or access; resulting in a very small change to historic landscape character.</p>



Impact grading	Heritage attributes
	Very minor changes to area that affect the ICH activities or associations or visual links and cultural appreciation.
No change	No change to archaeological fabric or setting. No change to elements, parcels or components; no visual or audible changes; no changes in amenity or community factors. No change to area that affect the ICH activities or associations or visual links and cultural appreciation.
Unknown	The significance of the change has not been ascertained.

- 3.9.5 It should be noted that in many cases impacts on individual assets, groups of assets, or Attributes can potentially be multiple, from different construction activities or resulting from different elements of the Scheme. Impacts can be both negative and positive. In cases where a range of impacts are anticipated, both negative and positive impacts are described, and a judgement has been made assessing the overall impact and effect of the Scheme on Attributes of OUV.
- 3.9.6 ICOMOS guidance notes that '*Direct impacts resulting in physical loss are usually permanent and irreversible; they normally occur as a consequence of construction and are usually confined within the development footprint. The scale or magnitude of these impacts will depend on the proportion of the attribute affected, and whether its key characteristics or relation to OUV would be affected.*' (ICOMOS, 2011: para 5–4).
- 3.9.7 The significance of the effect of change on an attribute is a function of the importance of the attribute and the scale of change, thus reflecting the weighting of value in the assessment of impact. Change can be adverse or beneficial. The significance of effect is expressed on a nine-point scale with 'neutral' as its central point:
- Major beneficial
  - Moderate beneficial
  - Minor beneficial
  - Negligible beneficial
  - Neutral
  - Negligible adverse
  - Minor adverse
  - Moderate adverse
  - Major adverse (ICOMOS, 2011: para 5 – 8)
- 3.9.8 The principles of the significance of effect assessment matrix below (refer to Table 3.3) have been applied to score the significance of effect as a function of the value of the heritage asset and the scale of change.

**Table 3.3: Significance of effect assessment matrix (based on ICOMOS, 2011)**

VALUE OF HERITAGE ASSET	SCALE and SEVERITY OF CHANGE / IMPACT				
	No Change	Negligible Change	Minor Change	Moderate Change	Major Change
For WH properties Very High – attributes which convey OUV	SIGNIFICANCE OF EFFECT OR OVERALL IMPACT (EITHER ADVERSE OR BENEFICIAL)				
	Neutral	Slight	Moderate / Large	Large / Very Large	Very Large
For other heritage assets or attributes	SIGNIFICANCE OF EFFECT (EITHER ADVERSE OR BENEFICIAL)				
Very High	Neutral	Slight	Moderate / Large	Large / Very Large	Very Large
High	Neutral	Slight	Moderate / Slight	Moderate / Large	Large / Very Large
Medium	Neutral	Neutral / Slight	Slight	Moderate	Moderate / Large
Low	Neutral	Neutral / Slight	Neutral / Slight	Slight	Slight / Moderate
Negligible	Neutral	Neutral	Neutral / Slight	Neutral / Slight	Slight

3.9.9 The condition of sites and assets expressing Attributes of OUV is also considered.

3.9.10 Temporary impacts may be short, medium or long-term, but they are reversible; irreversible impacts are described as permanent. Short-term would normally mean impacts that did not last longer than the construction period, medium-term impacts would persist beyond the construction period, but no more than 15 years, while long-term impacts would be longer than 15 years, but are still reversible. Temporary impacts can still harm the OUV of the WHS.

3.9.11 Heritage assets that contribute to the Attributes of OUV cannot be replaced or regenerated if they are physically damaged or destroyed, without damaging the authenticity of the WHS. All damaging impacts on the fabric of buildings are, therefore, permanently negative.

3.9.12 Impact assessment takes into account the SoOUV, Attributes of OUV, Integrity and Authenticity, and considers the relationship between them. The effects of changes arising from development upon Integrity and Authenticity are assessed.

3.9.13 Careful consideration has been given to the balance of beneficial and adverse impacts in HIA Section 7. When assessing a range of impacts on heritage assets, the HIA has taken into account both positive and negative impacts to arrive at an overall conclusion regarding the effect of the Scheme. In making this balanced judgement, a precautionary approach has been adopted so as to avoid overstating positive impacts and beneficial effects or under-reporting negative ones where these arise.

### 3.10 Assessment area

3.10.1 The HIA assesses elements of the Scheme at Little Eaton junction including new construction within and outside the WHS where this could impact on the OUV of the WHS focussing on the construction of a new junction at Little Eaton junction (and associated features).

3.10.2 For the purposes of this HIA, Kingsway junction and Markeaton junction are scoped out as they are not within the WHS or the WHS Buffer Zone. This has been agreed at the scoping stage. Potential impacts on cultural heritage as a result of the Scheme in these locations is considered within the cultural heritage chapter of the ES.

3.10.3 The assessment area for the HIA comprises land within the Derwent Valley Mills WHS and the buffer zone within 1km from the Scheme boundary at Little Eaton junction. Assets outside the boundaries of the WHS which are considered to be Attributes that convey OUV are also included, as appropriate based on professional judgement and consultation.

### **3.11 Assets groups and discrete assets**

3.11.1 To enable assessment, a number of assets have been grouped together due either to location or historical association. These are not assessed individually, but as groups in acknowledgement that it is the collective value of them as a group that express the OUV of the WHS.

3.11.2 Identified assets that convey Attributes of the OUV of the WHS within the assessment area comprise:

- Darley Abbey
- Allestree Hall and Park
- Historic landscape

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## **4 SITE HISTORY AND DESCRIPTION**

### **4.1 Introduction**

- 4.1.1 This part of the HIA sets out a brief history of the WHS. It describes the historical development and character of the assessment area, considers the historic landscape, including field patterns, boundaries and extant historic elements of the landscape and cultural heritage. It also considers nationally and locally designated heritage and non-designated heritage assets within the assessment area. This section focusses on Darley Abbey, as the site of the closest Key Properties of the WHS.
- 4.1.2 In addition, this section sets out the OUV of the WHS, including inscription criteria, the SoOUV, and the description of the Attributes which convey OUV and which contribute to Integrity and Authenticity described in the 2014 WHS Management Plan.
- 4.1.3 This section also describes the condition of the whole and of individual Attributes and components, physical characteristics and monitored views which may relate to Attributes. Although it focusses on the assessment area, it includes a description of the whole.

### **4.2 Description**

- 4.2.1 The Derwent Valley Mills WHS contains within its 24km (north to south) four industrial settlements. It extends from the edge of Matlock Bath and Cromford in the north, almost to the centre of the city of Derby in the south. The industrial settlements of Cromford, Belper, Milford and Darley Abbey are included within the boundary. The spine linking the settlements and the principal industrial monuments is the River Derwent. Historically, it was the water power which the River Derwent and its tributaries offered that provided the reason and impetus for the birth and growth of the Industrial Revolution.

### **4.3 History of the Derwent Valley Mills WHS**

- 4.3.1 The Derwent Valley is the birthplace of the factory system. The Derwent Valley provided the essential ingredient of factory production – water power. In combination with the pioneering work of Richard Arkwright, Jedediah Strutt, the Lombe brothers, Evan brothers and others, water power was successfully applied and used for the first time on a relatively large scale to power complex mechanised processes of silk throwing and cotton spinning. This not only revolutionised the Derwent Valley, but had dramatic consequences for the British economy. The factory system, using the Arkwright model system, also informed and inspired factory development in other countries across the world.
- 4.3.2 Further development of an urban factory system in Lancashire in the later years allowed the early Derbyshire mills to be retained in a rural landscape setting.
- 4.3.3 Each mill, each pioneering engineer and entrepreneur tells their own story in the development of Britain at the heart of the Industrial Revolution and is conveyed through the OUVs of the Derwent Valley Mills WHS.

#### **Derby**

- 4.3.4 Silk making in late 17th century England had grown during a period when fashion demanded luxury items. This demand was partly met by Huguenot refugees from

France who settled in England, bringing their weaving expertise. At the end of the 17th century interest grew in the commercial possibilities of silk manufacturing using water-powered machinery. This was led by Thomas Cotchett, a solicitor from Derby. He turned to an engineer called George Sorocold, who had recently been employed to supply Derby with piped water, to build him a water-powered mill on an island in the Derwent near the centre of Derby. The first attempt was not successful, but the task was taken up by one of Cotchett's employees, John Lombe. After engaging in a case of industrial espionage at an Italian mill, he returned with Italian workmen and plans for the Pietmontese throwing machines and attempted to recreate the secret Italian process of silk production in Derby.

- 4.3.5 In 1719 Thomas Lombe secured a patent for the machine and in 1721 he and his brother began to build a Silk mill in Derby with support from notable citizens that were keen to establish a new industry for the town. Thus, the infant stages of the factory system began. The Italian machines did not require a huge source of power and was able to use the weir and tail-race of the town corn mill. Lombe's silk mill soon became a complex of buildings and contained many elements of the modern factory and employed a large workforce of 300 people.
- 4.3.6 Whilst silk manufacturing was not replicated on a large scale, the main achievement was the system of working and the organisation of the workforce around the common power source; it was this that was inherited by later pioneers in later textile mills. The Derby Silk Mill and the associated wrought iron gates are now grade II listed buildings.

#### **Cromford**

- 4.3.7 Further development came between 1771 and 1791 when Arkwright set up the world's first successful water powered cotton spinning mills at Cromford, soon becoming the prototype and model for factory production. To power the mill, Richard Arkwright separated the water courses of Cromford Sough from the Bonsall Brook to create a new watercourse to the mill. Arkwright's first steps were slow and tentative. It is known that the mill was operational by 1774, but no further information is available. It is suspected that much of this early period was taken up with experimentation. Between 1772 and 1775 he perfected the mechanisation of the pre-spinning processes which embodied his second Cromford Mill built in 1776 - 77. He was financed by Peter Nightingale, a wealthy lead merchant and land owner. This was a successful partnership that led to the building of Rock House, Cromford Mill and houses for workers.
- 4.3.8 Following the construction of the second Cromford Mill in 1776 - 77, Arkwright continued his power driven endeavours. In 1777 mills were built in Birkacre, Bakewell and Wirksworth, in 1781 at Rochester and in 1783 at Cressbrook. Between 1776 and 1781 Jedediah Strutt, Arkwright's partner in his first Cromford Mill, built his first mills at Belper and at Milford. Others, using royal agreements that licensed the use of Arkwright's machinery or those that pirated his machinery, allowed the system to proliferate Britain and elsewhere. Arkwright himself, continued to develop his mill enterprise at Cromford before building his showpiece, Massons Mills, at Matlock Bath in 1783.

- 4.3.9 Sir Richard Arkwright died in 1792; his son sold most of the interest in all other mills apart from Matlock Bath and Cromford. From the 1820s profits were nominal, but subsequent family members kept the mills going and with acclaim through the cotton famine in the early 1860s at considerable cost to the family. The demise in fortunes brought the mills close to a sale. Masson Mill retained some value, although Cromford Mill had ceased operating large sections of the factory. It was Frederic Charles Arkwright that resolved the continuing demise by going into partnership with Dukinfield and John Edward Lawton. Lawton breathed new life into Massons Mill and by 1890 it was exporting sewing thread across the globe, based on the popularity of the sewing machine. In 1897, the mill became part of the English Sewing Cotton Company. It continued in use until 1992 after which it was adapted to a new use and reopened in 1999. Masson Mills is a grade II\* listed building as is the adjoining weir.
- 4.3.10 The Cromford Mill site was less fortunate. With little use for the machinery some was sold, some found new homes in museums, but sadly most is thought to have been destroyed. The second mill was used by William Hollins who invented a blend of wool and cotton called Viyella until the mill was destroyed by a fire in 1890. Further tragedy struck Cromford Mill with over development, then fires in the early and mid -20th century leading to demolition of large parts. Luckily, in 1979, the Arkwright Society purchased the mill and started a programme of repair and re-use. These today are the finest surviving and best preserved examples of an Arkwright cotton spinning mill.

#### **Belper and Milford**

- 4.3.11 Jedediah Strutt's first mill at Belper opened in 1776 within his son, William, developing North Mill in 1804. It is one of the earliest iron-framed buildings in the world. Strutt, unlike Richard Arkwright had considerable wealth and by waiting for Arkwright to demonstrate the full potential of Cromford Mill and its mechanical inventions and the factory scheme, he was able to invest confidently without experimentation or waiting for investment. Strutt boldly created weirs and redirected water courses to power mills. A second mill was added in 1784, the shell of which became the fire-proof North Mill in 1804. Belper North Mill is a grade I listed building, East Mill is grade II listed, also associated with the site are the arched footbridge which is a grade II\* listed building as is the Horseshoe Weir.
- 4.3.12 Milford was also the focus of attention for the Strutt family who bought the Makeney forge in 1781 shortly followed by the adjoining property, then Hopping Mill Meadow. By 1789 there were two mills being developed, one as a printing mill. A further mill was constructed in 1793. Other pioneers soon began to develop their own response and technological expertise in mill building and factory processes as well as other complementary advances to facilitate the emerging factories. The Cromford Canal was built under the direction of William Jessop assisted by Benjamin Outram in the early 1790s. The Cromford Canal ran 23.3km from Cromford to the Erewash Canal at Langley Mill. The canal had a profound influence on the economic growth of central Derbyshire achieving a substantial outreach by means of its many wharves and linking tramroads.
- 4.3.13 Other key mill sites within the Derwent valley include the 18th century cotton mill at Lea Bridge and Peckwash Mill.

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### **Darley Abbey**

- 4.3.14 Darley Abbey lies a little over 2km north of Derby city centre. Darley Abbey has a long history with many major phases of development combining to make a colourful and interesting history, including a monastery, a village, Darley Hall and Park and some earlier mills. Darley Abbey by the 17th century had already been established as an industrial hamlet and by the end of the century there were three fulling mills, a paper mill, two flint mills, a leather mill and two corn mills. However, it was the arrival and endeavours of Thomas Evans in 1782 which transformed Darley Abbey. Supported by industrialist Richard Arkwright, Evans founded the Boar's Head Mills in 1782 with the building of Long Mill. Middle, East, West and North Mills soon followed. These large mills were surrounded by ancillary buildings used for the cotton preparation, storage, bobbin spinning, a saw mill, coppice stores and stables. Little is known about the first mill on the site as it soon burnt down in 1788; however, it is believed to have taken a similar form to the extant Long Mill.
- 4.3.15 By the 1820s the Darley Abbey Mills employed more than 500 people and growth continued until c.1830. Spinning ceased when mule-spun yarn was imported from Lancashire, although all other manufacturing processes including dyeing and bobbin spinning continued. In 1862, printing of labels and promotional material was also added to the mills' repertoire.
- 4.3.16 The Darley Abbey Mills provided sewing, tambour (embroidery), mending, knitting cotton and haberdashery, all these were in addition to Evan buying in and selling additional, complimentary goods for resale. This offered Evans customers a comprehensive catalogue of products including sarsnet, a fine soft silk material for lining dresses; ferrets, a tape of cotton or silk; galloons, ribbons of gold or silver thread used to trim garments; and handkerchief, braces, pins, needles, bonnet wire, buttons and whalebone.
- 4.3.17 Darley Abbey Mills and its management differed from the other mills established along the Derwent Valley. It was the first mill, through the endeavours and commercial mindedness of Evans, to develop retail in addition to the industrial and commercial presence of the mills. In this way, they also served the domestic market by supplying materials too. In addition to catalogues, they also had agents working across Britain in many major industrial towns to further their business and products. With this, they marketed the brand name, Boar's Head, a name suggested by the family coat of arms. Boar's Head thread was exported all over the world. In the 1860s and 1870s, Boar's Head products won international recognition at the London exhibitions of 1861 and 1862, Paris 1867; Vienna in 1873 and in Paris in 1879.
- 4.3.18 The death of Walter Evans in 1903 brought an end to the Evans family involvement at Darley Abbey Mills. The mills were bought by former manager, John Peacock. The Peacocks ran the business until 1943 when it was taken over by J & P Coats. In 1969, the sale of the mills for different uses and to different and multiple owners began.
- 4.3.19 Long Mill is a grade I listed building that was rebuilt in 1789 after a fire in December 1788 destroyed the earlier building. Many of the exposed wooden structural members are protected against fire by metal sheathing. It is not clear if this is original, if it is it is

probably the earliest surviving example of fire-proofing in a textile mill. The attic was reputedly used as a schoolroom.

- 4.3.20 West Mill and East Mill are also grade I listed buildings. These were built during the early 19th century. The site also contains many other listed buildings. This reflects Boar's Head Mills as being amongst the most complete of any of the early cotton factory sites. It includes some exceptional examples of early large scale factory buildings.

### **Industrial communities**

- 4.3.21 The factories brought with them associated communities, with a high number of people moving into the area on the promise of work. With them came the children, a subset of the community considered to be an under-utilised resource. Factory masters thought that children were the workhorses of the factory system. Once the decision was made to utilise child labour, the factory masters tied themselves to also supporting the family units that came with them. Housing and community buildings were built alongside the emerging factories. It was believed that if the mills were to flourish then so too must the families
- 4.3.22 Men were not at the heart of the mill system so it became necessary to find them work. The men were often in work weaving, whilst the children and wives were put to work in the mills. At Darley Abbey employment was found for men in the neighbouring paper and corn mills, which predominantly employed male labour. The Strutts employed men on their farms and in nailshops. Carefully considering how male labour was utilised ensured that the much sort after child labour force was maintained and in ready supply.
- 4.3.23 The first houses Richard Arkwright built, the North Street terraces (Cromford) of 1776 - 77, epitomised the essence of what was to become a pattern for the Derwent Valley factory masters. After the success of the houses in North Street, the Arkwrights' developed a village at Cromford, with a Market Place which gave the settlement a focus, soon becoming a viable economic entity in itself. As well as housing and commercial activity, Arkwright also recognised the need for his new community to foster additional activities and identity. He believed that social life and traditions united communities and soon began to invent traditions and customs that existed in older, well established settlements. Clubs and societies were also encouraged. A Sunday school and day school was also established. Religious life was less well catered for and only in 1797 was a church established as an adjunct of factory discipline.
- 4.3.24 In Belper, the Strutts chose to establish their settlement adjacent to an existing and established community. The older community, based on agriculture and nailing had grown to be a market centre long before Strutts' involvement. However, the construction of the Strutts' mills and housing further strengthened an already successful community. The earliest housing is thought to be Short Rows and was simple two cell buildings, one up and one down. The next were back-to-backs in Berkin's Court and better quality three storey houses in Belper Lane. Further three storey houses were added in Long Row, Hopping Hill and Smith's Court and concluded the first phase of house building.
- 4.3.25 The houses in Belper demonstrated the intention to make mill housing the first choice for the most important members of the workforce, the overseers. Each house had an



extension, a substantial garden and an individual lavatory. Unlike Arkwright's houses, the Strutts imposed a tie between working in the mill and having a house. This was strictly enforced through deduction from wages. The houses displayed and reiterated the hierarchy that existed within the factory with the better quality housing for more senior members of the workforce and the smaller houses for those with the least authority.

- 4.3.26 Control of the workforce and strict enforcement of rules was a norm with forfeits and fines to be paid for inappropriate behaviour. Discipline was maintained by overseers in the factories and outside of the work, watchmen employed by the Strutts' reported inappropriate behaviour.
- 4.3.27 The Strutts also had philanthropic activities and concentrated efforts on the supply of milk, supplying tea and coffee with profits funding medical care for those that had subscribed. Other philanthropic endeavours included a sick club for all female employees and the establishment of the Belper Provision Company, a co-operative to distribute profits amongst its customers. Similar endeavours took place in Milford. The Strutts also assisted others to provided places of worship for the workers and built a chapel for those that shared their Unitarian faith; illustrating that they did not indoctrinate their workers to follow any particular belief system.
- 4.3.28 They also embraced education with the provision of Sunday Schools and Day Schools and insisted that children attended school before starting work in the mills, thus guaranteeing a certain level of literacy in the labour force. The Strutts also insisted that those under 20 attend Sunday School.
- 4.3.29 Modern Belper illustrates at least four phases of development: the original medieval rural community, the later growth lower down the hill, the industrial community established by Jedediah Strutt in the 18th century on the northern edge of the existing settlement; and the 19th century expansion of the community centre along King Street and Bridge Street.
- 4.3.30 In Milford, houses and farms which formed the Milford factory settlement have survived substantially in tact with little demolition.
- 4.3.31 Darley Abbey contains the classic Derwent Valley three-storey mill worker's terracing similar to the earliest Cromford housing. In addition it also has a significant number of back-to-back housing not found in Cromford, it also has the earliest known example of a cluster house. The houses the Evans created in Darley Abbey, like other Derwent Valley mill owners, were provided for their mill workers. Some existing houses were purchased with the existing mills. Soon after they began building their own houses in Darley Abbey.
- 4.3.32 The Square (Flat Square) No. 1 - 12 and West Row are listed grade II and were probably the first of the housing development provided by the Evans. It was in existence by 1796 and believed to date from c.1790. The houses were built on a flat piece of land just over the bridge from the cotton mills. As the name suggests, they are built round three sides of a square and are three storey, brick built with slate roofs and one continuous roofline. Other houses include those in Darley Street (grade II listed), Hill Square, Poplar Row (grade II), Lower New Road, Upper New Road, The Hollies/White House (grade I), Brick Row (grade II), The Four Houses, Miles Ash Lane

(grade II), Lavender Row (grade II), Folly Houses and Houses in Mill Yard (grade II). Other buildings associated with the endeavours of Evans include St Matthew's Church and Darley Abbey School, both grade II listed buildings. All these buildings, in addition to the mills and the ancillary buildings are attributes which convey the OUV of the Derwent Valley Mills World Heritage Site.

- 4.3.33 During the late 18th century Darley Abbey doubled with the development of the mills. Evans, like Strutt, considered the wider needs of his mill workers. A church was built in 1819 and the school constructed in 1826, although education of children had begun 30 years earlier in the attic floor of the mill, as well as attending Sunday School and Day School. Similarly, feeding the community was of concern to Evans, and workers were able to buy food from the mill owners.
- 4.3.34 The settlement that Evans created has survived almost completely intact, albeit the houses themselves have been altered internally and externally. A few significant buildings have been demolished including the two Evans houses, Darley House and Darley Hall, the Evans Farm and the paper mill, but the settlement and the complex is still illegible and whilst not a planned or model community it is as important as Belper and Cromford.
- 4.3.35 Throughout the 19th century, textile manufacturing remained the largest single economic activity in the Derwent Valley. Derby continued to grow and benefited from a second wave of industrial expansion with the coming of the railway and its related industries particularly in the developing rail network and locomotive manufacturing.
- 4.3.36 Matlock Bath developed as a resort for tourists and day visitors and led to the construction of hotels and guest houses to accommodate the visitors.
- 4.3.37 Cromford did benefit, peripherally, from visitors to Matlock Bath, but remained a mill town. Belper developed other industries as well as hosiery and textiles such as engineering and iron-founding. By the end of the 19th century Belper emerged as a diverse and resilient manufacturing economy.
- 4.3.38 Darley Abbey remained a centre of textile manufacturing, but also became a commuter settlement for Derby just 2km south.

#### **The significance of the Derwent Valley Mills**

- 4.3.39 From the brief overview of the development of the Derwent Valley Mills WHS, it is clear that the 18th century witnessed a fundamental change in society and economic organisation. This resulted in a momentous change that came to be known as the 'Industrial Revolution'. Innovations such as the harnessing of power from natural resources and energy to drive mechanisms housed in mills producing goods was undertaken at an unprecedented rate.
- 4.3.40 The first stages of this factory system and processes occurred in the Derwent Valley with Lombe's Silk Mill in Derby in 1721 which allowed processes developed in Italy to be adapted to water power. But it was Richard Arkwright's Cromford Mill which provided the blueprint for the factory production and the factory system. Arkwright's system was soon copied widely within the Derwent Valley, Britain and beyond in other countries. The buildings which housed the new industry and its workforce and the landscape created around them remain.

- 4.3.41 The degree of survival and the legibility of the early mill sites and their landscape setting is outstanding. The contribution and value that Cromford has within the WHS is further emphasised by the survival of the settlement that was constructed to house the workers. As Cromford was relatively remote and sparsely populated, Arkwright could only obtain the child labour he needed if he provided houses for the parents. At Cromford, a new community emerged that revolved around the mill. This new kind of industrial community was replicated in many other Derwent Valley settlements.
- 4.3.42 Arkwright's activities stimulated a surge in growth in the Derwent Valley, inspiring and stimulating investment and growth by other entrepreneurs such as Jedediah Strutt, Thomas Evans and others that also made vast contributions to the factory system, industrial exploits and the British economy that had an influence on countries far beyond Britain. They were enlightened employers that understood that their success and the success of their mills lay in the hands of their workforce. Ensuring their wellbeing ensured theirs. As such, the development at Belper, beginning in 1776 - 77, at Milford in 1781 and Darley Abbey from 1782, provided early models for the creation of industrial communities. Each settlement is different despite being brought into being by the same economic and industrial pressures and constraints as Cromford and offers an insight into the individual mill owners approach. In each settlement there is a high degree of survival and houses of an early date. Nowhere outside of the Derwent Valley does the physical evidence of the early factory community survive in such abundance.
- 4.3.43 Throughout the 19th century, the manufacturing of cotton thread continued and prospered in the Derwent Valley. This was sufficient to maintain the mills and the communities, with some mills such as Masson and Belper either extending or building new mills. Latterly, the manufacturing of sewing thread replaced their earliest function as spinning mills. However, fortunes changed as the heart of the textile industry moved to Lancashire and Cheshire and the Derwent Valley became a relatively remote place. Cromford particularly suffered as the geographic constraints and lack of access restricted growth. This has meant that many of the features, buildings and the rural landscape have been retained and can be experienced relatively unchanged from the 19th century.
- 4.3.44 Derby was the exception to this restriction in growth, the coming of the railway in the second half of the 19th century allowed Derby to diversify from the market and mill town it had become and became a railway town and marked a second phase of industrial expansion, although it managed to avoid engulfing the Derwent Valley north of Derby. As such the original late 18th and early 19th century mills, housing and infrastructure have survived in a relatively intact cultural landscape.

#### **4.4 Cultural landscape**

- 4.4.1 The Derwent Valley Mills WHS Management Plan is accompanied by a Historical Narrative (WHS Management Plan, Appendix 1) it describes the spatial context of the area as follows:

*'The Derwent Valley Mills World Heritage Site consists of a 24km length of the lower Derwent Valley in Derbyshire in the East Midlands of England stretching from Matlock Bath in the north to Derby City Centre in the south.'*

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*It includes within its boundaries a series of historic mill complexes, river weirs and associated settlements and transport networks. It combines elements of both a relict or fossil landscape in which the evolutionary process of industrialisation came to an end, leaving significant distinguishing features visible in material form, and a living landscape with significant evidence of its further evolution over time.'*

#### 4.4.2 The cultural landscape of the WHS is described as:

##### *'Archaeology and Early History*

*The Derwent Valley links the Trent Valley with the uplands of the carboniferous limestone and gritstone moors of the Peak District. The gravel terraces of the lower Derwent and Trent Valleys are rich in archaeological remains of the prehistoric period. These usually take the form of cropmarks (visible on aerial photographs) rather than upstanding earthworks.*

*Although the Derwent Valley has few upstanding prehistoric monuments, and despite its unsuitability as a major communications route in later periods, it may have acted as a means of access, linking the lowlands with settlements in the uplands. This role is possibly evidenced by the finds of prehistoric flint tools and Bronze Age metalwork within the site and buffer zone. The long-standing historic importance of the River Derwent is indicated by the fact that its name, like that of many important English rivers, is of Celtic origin.*

*The Romans established a fort, which they called Derventio, at Little Chester, about a kilometre north of the present city centre of Derby. It became the hub of a road network, enabling it to control the surrounding region and become a market and administrative centre. Further north, the Romans exploited the lead veins that were found in the limestone country of the Peak District. Throughout the Middle Ages the lower Derwent Valley remained a quiet provincial backwater with rural settlements based upon the manorial system. The only monastic foundation was the Augustinian House at Darley Abbey, in what would have seemed a fairly remote, secluded spot. Gradually, the exploitation of local natural resources, such as wool and iron-stone in the Derwent Valley area, and the lead and zinc ores that were found in the Peak District hills to the north west, resulted in the development of modest industrial activities, especially cloth-making, metal smelting and casting. Derby became a centre for these activities and, by the 17th Century, formed part of the East Midlands 'textiles triangle', which included Nottingham and Leicester. Economic development in the Derwent Valley itself, though, was inhibited throughout this period by its poor communications. The roads - little more than tracks for the most part - that did exist, tended to follow dry ridges and avoid the marshy river valley, its steep sides and difficult crossing points.*

##### *The Industrial Revolution and the Valley's architectural heritage*

*In this remote area an industrial economy emerged and flourished. The River Derwent and its tributaries were crucial in providing the waterpower that underpinned the growth of textile manufacture and the various metal, paper and mineral based industries which were colonising the Valley. Gradually, communications improved, first through the construction of turnpike roads and*

*later, and more emphatically, through the opening of the Cromford, Erewash and Derby Canals, which linked the area to the national transport system.*

*The sustained economic investment in industrial development between the 1770s and the middle of the 19th Century changed the face of the lower Derwent Valley. Around long established hamlets and small villages new settlements emerged. None was more successful than Belper, which grew to a size of such economic importance that it was able to supersede Wirksworth, traditionally the area's second town. In the 1830s, when the new Poor Law Union was introduced with its workhouse and administrative offices, it became in effect the seat of local government for a wide area.*

*Derby, unassailably the County town, retained its market and administrative function, but added from an early date a strong industrial and commercial base. The town's wealth and self-confidence found expression in the elegant Georgian and Regency houses, a number of which survive, around the Cathedral and the Silk Mill.*

*Further north in the Valley, the same industrial and landed wealth bequeathed a clutch of imposing and comfortable houses constructed by the business men, professionals, landowners and, above all, the new industrial and commercial entrepreneurs. Of those that have survived, Willersley Castle, the country mansion that Sir Richard Arkwright built for himself and his family, is the most opulent and notable example. However, such houses and their estates and the large farms which were often associated with them are not the Valley's principal architectural legacy of its industrial past. This distinction belongs to the Mills, their millponds, weirs and watercourses and to the mill workers' cottages that accompany them. The terraces and groups of houses in the Derwent Valley factory settlements are not the work of known architects but they exhibit a superior quality of design which derives both from local vernacular tradition and from an appreciation of Georgian style and proportions.*

*The buildings and structures related to the Cromford Canal and the North Midland and the Manchester, Matlock, Buxton, and Midlands Junction railways, are examples of some of the earliest architecture of the new modes of transport in the late 18th and early 19th Centuries, which served the Valley's industrial complexes. The North Midland Railway structures also provide evidence of the Stephenson's influence on railway engineering.*

*Growth of the cotton mill communities in the early years of the 19th century generated the building of schools, chapels and churches and later in the century other community facilities, such as the district work house, public baths, a police house, a cemetery and public parks. Many of the new facilities were initiated and financed in whole or in part by the mill owners.*

*Because of the slowing of urbanisation in the Valley by the end of the 19th century the setting of many of the buildings was largely preserved. In many cases the building's architectural heritage is enhanced by landscape setting and in Cromford and Matlock Bath by the dramatic and picturesque scenery of the Matlock Gorge.*

## Geology

*The geology of this part of the Derwent Valley consists mostly of rocks from the Carboniferous Series. In the north, around Cromford and Matlock Bath, the hard, resistant carboniferous limestone produces rugged upland scenery through which the River Derwent carves a dramatic narrow gorge. The limestone rock in this vicinity is faulted and folded and contains bands of volcanic basalt and mineralised veins which are the source of ores of lead, zinc, barium and fluorine. Further south the carboniferous limestone is overlain by millstone grit of the same series which, in this part of Derbyshire, consists of fairly soft shales interspersed with hard layers of coarse sandstone grit locally known as gritstone. In fact, the gritstone outcrops on both sides of the River Derwent as far south as Duffield and Little Eaton to provide steep-sided hills and create a well-defined, enclosed valley. In several places the gritstones are the source of high quality building stone.*

*Just to the north of Derby the Carboniferous Series is abruptly replaced at the surface by the Triassic Sandstone Series, which consists mainly of soft marlstones and harder red or pink sandstones. The latter produce a distinct low ridge to the west of Darley Abbey. These sandstone bluffs, together with the more recent river gravel terraces, attracted early settlement. The low-lying alluvial flood plains of silt, clay and sand, first seen south of Milford, broaden considerably below Derby, eventually joining the main Trent Valley.*

*There are five Regionally Important Geological Sites. These are identified in Local Plans for protection.'*

### 4.4.3 The landscape of the WHS is described as:

*'The Industrial Revolution inevitably brought about many changes. Textile mills and industrial settlements, waterpower systems, turnpike roads and canals and, later, railways, all changed the landscape. Farming was intensified, the River Derwent was tamed - up to a point - by engineering works, woodlands were reduced and quarries dug into hillsides to provide building materials. Even so, by around the middle of the 19th century, with the exception of Derby, and to a lesser extent Belper, this had become an area of 'arrested urbanisation'. As a result, most of this stretch of the Derwent Valley retains a rural or semi-rural appearance. Most of the hills, and particularly the steeper slopes, remain wooded; in some cases the woodland characteristics have been influenced by past management associated with local industries e.g. Crich Chase where many ancient coppiced oaks are a legacy of white coal making for lead smelting which dates back to the 16th century and possibly earlier.*

*Some sections of the valley, particularly the part between Ambergate and Cromford, are almost entirely rural in character. Much of the surviving elaborate waterpower infrastructure of ponds, weirs and leats for the mills now provides charming and tranquil aquatic habitats, as does the disused stretch of the canal running south from Cromford to Ambergate. Most quarries are now disused and have merged into the natural landscape to form interesting habitats of a distinctive variety. The same is true of the spoil heaps of abandoned lead*

*workings on the northern edge of the area, which support rare species of plants tolerant to the otherwise toxic ground conditions.*

*This stretch of the Derwent Valley contains a large number of protected areas of landscape and wildlife habitats. Most of the undeveloped area of the valley north of Milford is classified as Special Landscape Area in the statutory local plans, which is the highest quality of landscape that is designated in Derbyshire outside the Peak District National Park.*

*Although the site was not inscribed on the World Heritage List as a “cultural landscape” (one of the UNESCO categories for World Heritage Sites) it displays many of the characteristics of this categorisation.’*

- 4.4.4 Transportation development played an important role in the economic development of the WHS and influenced the landscape of the Derwent Valley. The economy up until the early 19<sup>th</sup> century, originally based on the exploitation of natural resources and water power (River Derwent), suffered from poor communication. The establishment of the textile mill complexes at Masson, Cromford, Belper, Milford and Darley Abbey brought about significant improvements to communications such as turnpike roads and national canal network which enable good links into the valley from Derby via the Erewash, Cromford and Derby canals. These played a major part in the industrialisation of the valleys. The railway, as early as 1840 linked Derby to Belper along the valley bottom.

#### **4.5 The study area**

- 4.5.1 The above text considers the history and cultural landscape of the whole of the WHS. At 24km long, the WHS is vast in scale. Not all elements of the above description are applicable to the assessment area. The assessment area focusses on the area in and around the Scheme at Little Eaton junction and what it contributes to the understanding of the whole, as well as identifying those attributes that convey OUV within the area.
- 4.5.2 Little Eaton junction is set in a semi-rural landscape. With the Ford Farm Mobile Home Park, the property Fourways, and commercial and retail facilities located to the north of the existing junction. The Derby Garden Centre occupies the space between the A38 and the B6179 to the north of the junction (accessed off the B6179). The eastern edge of Breadsall village is located approximately 400m to the south-east of the existing junction, whilst the southern edge of Little Eaton village is located to the north of the junction. The A38 to the west of the existing junction crosses over the River Derwent and the Midland Mainline Railway. It is at this point that the existing Little Eaton junction (and the Scheme) is located with the Derwent Valley Mills WHS. This part of the WHS is one of the narrowest points along the 24km long designated area. The boundary of the buffer zone at this point is largely the same footprint as the WHS boundary. North and south of Little Eaton junction the boundary of the WHS corresponds to the River Derwent and the river floodplain. To the south, it incorporates the historic core of Darley Abbey, before continuing to Derby city centre, terminating at the Silk Mill. To the north, the WHS skirts to the east of Duffield and to the west of Blue Mountains, Edgehill and Duffield Bank before following the river to include Milford, Belper and on to Cromford where the WHS terminates. To the north east, the buffer zone notably includes Allestree Park and Hall.

- 4.5.3 Remains of Derby Canal (A13) can still be seen near Alfreton Road, north of Ford Farm (now Starbucks café) where it is visible as an earthwork. The Little Eaton branch of the Derby Canal (A13) was opened at the end of the 18th century. It connected with the Trent and Mersey Canal at Swarkestone and the Erewash Canal at Sandiacre. The spur that ran north from Derby to Little Eaton connected with an early tramway (Little Eaton Gangway or the 'Gang Road') (A14). The tramway linked Little Eaton to the coal mines at Denby and Kilburn, and the canal carried goods and minerals, although its main cargo was coal until the traffic was put onto the railways in the mid-19th century (by 1848 a short branch of the Midland Railway, Ripley branch, Amber Valley and Erewash line (A92) had been completed as far as Little Eaton where there was a station and goods yard (A93) (White, 1857)). The Derby Canal Act was passed in 1793, (the engineer was Benjamin Outram), and construction was soon underway. The Little Eaton branch was opened in 1795 although the canal was not fully completed until 1796. To transfer the goods and minerals from the gangway, the bodies of the wagons were taken off their bogies and loaded onto the barges at the canal wharf and then towed by horses down to Derby.
- 4.5.4 In 1798 it carried 28,571 tons of coal, of which 40% came from the Little Eaton gangway. By 1803 this had risen to 50,374 tons, with 55% from the gangway. Rather than it just supplying Derby, the company encouraged through trade on the canal, and this contributed to its profitability. Traffic figures for February and March 1839 indicate that the Little Eaton line carried 13,332 tons (Hadfield, 1970).
- 4.5.5 An attempt was made in 1872 to sell the whole canal to the Midland Railway for £90,000, without success, and a similar offer to the London and North Western Railway also failed. Traffic suffered further decline when Butterley Tunnel on the neighbouring Cromford Canal had to be closed. The Little Eaton gangway was closed in 1908, ten years after the action was first considered, and the Little Eaton branch followed on 4 July 1935, when the company obtained a warrant for its closure.
- 4.5.6 Commercial traffic on the remainder of Derby Canal ceased in 1945 (Smith, 1980). In 1964 the canal company gained permission to close the rest of the canal.
- 4.5.7 The Scheme area does not contain any of the Key Properties of the WHS. Notably these are largely contained within Cromford. Belper and Milford. The closest Key Properties are located at Darley Abbey which is included within the assessment area. Also there are no monitored views that feature the Scheme.

#### **Historic map regression of study area**

- 4.5.8 Historic maps of the areas are reproduced within the ES Cultural Heritage chapter (Chapter 6).
- 4.5.9 At the end of the 19th century the Ordnance Survey maps shows Alfreton Road running between Little Eaton and Little Chester, crossing the Scheme footprint. Other historic transportation routes are also shown. Derby Canal (Little Eaton branch) follows a route close to and parallel with Alfreton Road (towing path labelled on the western side of the canal) (1:2500 scale, 1882 map). The historic Midland Railway line (Derby to Chesterfield section) crosses farmland between the River Derwent and Alfreton Road with a spur off the mainline to Little Eaton junction (part of the Ripley branch, Amber Valley and Erewash line). The line to Little Eaton was opened in 1848 and the



Ripley branch was completed in 1856, but it closed in 1965. The Derbyshire and North Staffordshire Extension Railway Line is shown to the south of Breadsall.

- 4.5.10 The original Croft Lane crosses the Derby Canal on Croft Bridge and joins Alfreton Road. Beyond the junction a trackway appears to provide access to farmland to the west of the Midland Railway line via a level crossing. Breadsall is shown as a small nucleated settlement with farms and buildings within its historic core. Paths and trackways are shown leading from Breadsall to the west, crossing farmland. One path crosses Derby Canal on a footbridge. Ford Farm is shown next to Alfreton Road and a lane runs in front of the farm to a ford on the River Derwent to the west (track continues to the west beyond the crossing). There appears to be a boundary between the farm and the lane. Next to Ford Farm the Alfreton Road crosses the canal on a bridge. In the wider area, north of Ford Farm and alongside the River Derwent, a number of small air shafts are shown and labelled – these are associated with filter tunnels (understood to be constructed of brickwork, laid over gravel beds within groundwater) which are approximately 1.2m in diameter, and buried approximately 3m below ground level. They were installed in the 1850s and extended in 1890 and 1903 and were used for drinking water supply. These tunnels traverse either side of the River Derwent and connect to a number of air vents either side of the A38. Derby Corporation Water Works are depicted alongside Alfreton Road. The topographic feature that is Peg Low is shown to the north of Breadsall. Farmland is divided by linear field boundaries that enclose fields of different shapes and sizes (planned enclosure) between Breadsall and Allestree. Some of these were severed by the Midland Railway line.
- 4.5.11 There do not appear to have been any significant changes to the study area in the early 20th century, although flood defences (long sinuous earthworks) are shown close to the River Derwent on the Allestree side. The 1914 Ordnance Survey maps (1:2500) show that more air shafts have been built alongside the River Derwent south of Ford Farm (series of larger square structures). The river crossing (ford) near to Ford Farm has been replaced by a bridge and the trackway to the west appears to have been replaced by a lane to Allestree Fields.
- 4.5.12 By 1938 Derby Canal appears no longer in use (sections are labelled as 'Old Canal'). Alfreton Road has been slightly re-aligned (straightened) next to Ford Farm (road built over part of the canal) and the original canal bridge appears to have been demolished and replaced. There is a wider (splayed) entrance onto Ford Lane. The original bridge over the River Derwent at Ford Lane appears to have been replaced by a larger (wider) structure (labelled Allestree Ford Bridge on Ordnance Survey maps from the early 1960s). The track next to Croft Bridge appears to be blocked off and is now a path. A Canal wharf next to Croft Bridge is labelled as 'disused' (buildings shown at this location up to 1969 on 1:10,000 scale maps). On the western side of the River Derwent there is new development along Ford Lane (Allestree Fields) which expanded in the early 1980s.
- 4.5.13 In the 1960s Derby Corporation Water Works was enlarged and large ponds are shown next to the works. The Ordnance Survey maps show that by the mid-1970s there had been major changes to Little Eaton junction. A new road (labelled A61) had been built on a large embankment to take it over the Midland Mainline railway line and onto an overbridge crossing the River Derwent. A new roundabout was introduced (Little Eaton

junction). Alfreton Road appears to have been widened/ improved. As a result of the road improvements, more of the canal appears to have been built over (its alignment is still visible north of Croft Lane in the shape of the new highway boundary). The 19th century canal footbridge is still labelled alongside the improved Alfreton Road. There were also major changes to the road layout in the area around Ford Farm, including a new spur road off the A61 to Allestree Ford Bridge (replacing historic Ford Lane). A caravan park is shown next to Ford Farm, and a new property 'Fairways' is shown between the Midland Mainline railway line and Ford Farm. A refuse tip is marked on the Ordnance Survey maps to the north of Ford Farm (registered landfill site and licensed waste management facility). New housing development is shown in Breadsall, including in the area to the south of Croft Lane.

- 4.5.14 The existing road layout had been established by the early 1980s. At this time the western part of Croft Lane is re-aligned with the introduction of a new spur road linking it to Alfreton Road (at this time it is likely that Croft Bridge was closed to road traffic). Little Eaton junction roundabout is modified to accommodate the new A38 trunk road to the north that crosses an area that was formerly farmland and which bisects the water works. It appears that the junction improvements also resulted in the loss of boundary features associated with Ford Farm.
- 4.5.15 The embankment that carries the A38 over the Midland Mainline railway line and onto the bridge over the River Derwent appears to have been created on land reclaimed from a channel of the River Derwent.

#### **4.6 Historic landscape context**

- 4.6.1 The following section summarises the DCC Historic Landscape Character Assessment (Barnatt et al., 2000). In addition to the DCC historic landscape character assessment, Natural England National Character Area descriptions were reviewed, comprising Derbyshire Peak Fringe and Lower Derwent (Character Area 50 that encompasses Little Eaton junction). The historic landscape character areas discussed in this section are shown on Figures 2 and 3. The character areas that are shown are those that have been identified within an approximate 500m radius of Little Eaton junction.
- 4.6.2 The area is within Natural England's National Character Area 50 (Derbyshire Peak Fringe and Lower Derwent) (Natural England, 2014) which is characterised by stock rearing on permanent grassland along valley floors with areas of improved grassland and arable cultivation. Hedgerows are predominantly of mixed species with oak and ash trees. The medieval pattern of village based settlement with its open fields and large areas of common land were later subject to piecemeal and planned enclosure. Farmsteads are scattered across the farming landscape, and the Industrial Revolution had a far-reaching impact on the landscape (from the later 18th century mills attracted workers leading to the creation of the first industrial towns such as Darley Abbey).
- 4.6.3 The landscape character assessment for Derwent Valley Mills WHS (DCC, 2014: Appendix 5) describes the landscape type as predominantly river meadows, overlooked by sandstone hill to the east and urban settlement to the west (Allestree). The Derwent Valley Mills WHS Management Plan describes the cultural landscape as it approaches Derby as being characterised by heavy soils with river meadows vulnerable to flooding which has led to the early abandonment of arable farming,

leaving evidence of medieval ridge and furrow around Duffield and Allestree (DCC, 2014: Appendix 14).

- 4.6.4 Six broad historic landscape character areas have been identified within the study area.

**Medieval, post-medieval and modern settlement**

- 4.6.5 The historic core of Breadsall has its origins in the medieval and post-medieval periods (HDR6188), and expanded in the modern period with development south of Croft Lane (Brookfields Drive and Station Road) (HDR6187). Little Eaton developed during the post-medieval period as an historic mill town (HDR3480). Historic Allestree has medieval origins, but within the study area extensive development took place in the post-war period (Allestree Fields) (HDR766).

**Historic and 20th century strategic communication routes**

- 4.6.6 Improved transportation links that developed from the later 18th century helped to foster the industrial development and expansion of the city of Derby. Some of these communication routes now have sections of woodland alongside as a result of deliberate planting to act as screening (A38 trunk road) or as a result of their disuse or abandonment, or being severed during road improvement works (Derbyshire and North Staffordshire Extension railway, and Derby Canal).
- 4.6.7 The Little Eaton branch of the Derby Canal connected with the Little Eaton tramway (constructed in 1793) that ran north to the pits at Smithy Houses and Denby Hall Colliery. Wagons were taken off the tramway and loaded onto barges at the canal wharf at Little Eaton and then towed by horses down to Derby. Derby Canal originally followed an alignment parallel to historic Alfreton Road within the study area and is now disused. Parts of it have been demolished/ infilled for modern road improvement including Little Eaton junction. North of Starbucks café carpark (former Ford Farm) a stretch of the disused canal survives alongside the road as an overgrown and partly infilled linear channel, including the towpath which is defined by a line of unmanaged hedging stock. The canal survives either side of Croft Lane (where the lane originally joined Alfreton Road).
- 4.6.8 The Midland Mainline railway line (opened in 1840) is located between the River Derwent and Alfreton Road and it also follows the same north-south communications corridor. A branch line connected Derby to Ripley and ran through Little Eaton (the spur reached Little Eaton Quarries by 1848 and Ripley by 1855). Little Eaton was later served by a railway station and in the early 20th century Little Eaton became a popular destination for day trips. The dismantled Derbyshire and North Staffordshire Extension line to the south-east of Breadsall was opened in the 1870s to link the towns of the east midlands to Burton upon Trent.
- 4.6.9 Roads were improved under the turnpike system. The existing A38 and A61 trunk roads were built from the 1970s and have introduced large earthworks (cuttings and embankments) and structures (concrete overbridges across the Midland Railway line, River Derwent and an underpass between the river and the railway) into the floodplain of the River Derwent. The construction of a new spur road that links Croft Lane to the A61, south of Breadsall, has also introduced new road infrastructure.

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### **Post-medieval and modern industrial, civic and commercial**

- 4.6.10 Derby Corporation Water Works at Little Eaton was already established by the 1880s (NDR3475) and was enlarged in the 1960s, it occupies land either side of the A38 trunk road. The ponds to the west of the water treatment works (HDR3477) are associated with the works and are shown on 20th century Ordnance Survey maps.
- 4.6.11 Along Alfreton Road on the southern side of Little Eaton there is a small, 20th century, industrial estate (off Duffield Road) (HDR3474). A modern garden centre occupies a narrow slice of ground between the A38 trunk road and Alfreton Road, south of the waterworks (HDR3476). There is also a modern industrial estate (1970s) north of Little Chester (Derby) which is also along the Alfreton Road (HDR3140).
- 4.6.12 North of Little Eaton junction there is an area of scrubland that is used as a storage area for plant and material (HDR3473). This area is a landscaped refuse tip, registered landfill site and licensed waste management facility as shown on Ordnance Survey maps from the 1970s.

### **Modern ornamental parkland and recreational**

- 4.6.13 There is a small static caravan park and vehicle/ container/ materials storage area alongside Ford Lane, including a coffee shop (formerly Ford Farm) and the property Fourways (shown on Ordnance Survey maps from 1974) (HDR3472).

### **Medieval, post-medieval and modern fields and enclosed land**

- 4.6.14 Between the historic settlements of Breadsall, Little Eaton and Allestree is an area of farmland which has been to some extent modified by the historic and modern communications routes that utilise and navigate through the River Derwent valley and floodplain. The existing pattern of fields not only reflects the planned nature of the enclosures, but also the impact of the communications routes themselves. Field patterns include:
- 'Planned enclosure containing ridge and furrow'. Fields west of Alfreton Road, Breadsall (HDR3154) have suffered boundary loss as a result of the construction of the A38 trunk road. Since the end of the 19th century there has also been minor boundary loss as a result of agricultural activities. Remains of ridge and furrow are barely discernible, although they have been detected by recent archaeological geophysical survey undertaken for the Scheme (ARS, 2016).
  - 'Small irregular fields'. Some of these are likely to have their origins in the Medieval and post-medieval periods (fields south of Morley Lane, Little Eaton (HDR6222); fields north of Breadsall (HDR6207); fields south-west of Breadsall (HDR6192)). The legibility of the fields west of Alfreton Road, Little Eaton (HDR3478) has been reduced by the presence of a former landfill and waste management facility and the introduction of a solar farm. Fields around Allestree Ford Bridge, Abbey Hill (HDR3159) are modern and have been created out of larger fields as a result of the construction of the A38 trunk road.

- 'Large irregular fields'. The field north of Allestree Ford Bridge, Ford Lane, Little Eaton (HDR3468) has resulted from the construction of the Midland Mainline railway line in the middle of the 19th century. Fields south of Glebe Farm, Breadsall (HDR6210), and Fields north of Breadsall (HDR6211) are likely to have their origins in the medieval and post-medieval periods, although the legibility of HDR6211 has been affected by modern boundary loss and the construction of the A38 trunk road.
- 'Large regular fields'. Fields near Glebe Farm, Little Eaton (HDR6217) are of post-medieval date.
- 'Small regular fields'. Fields west of Breadsall (HDR6209) are of modern origin. Fields along Alfreton Road, Breadsall (HDR3154) are of post-medieval date, although the legibility of HDR3154 has been affected by minor boundary loss as a result of modern road improvements along Alfreton Road. However, north of Croft Lane the presence of ridge and furrow earthworks and linear earthwork banks indicate probable earlier origins in the medieval period. Fields west of Alfreton Road, Derby (HDR3153) are of post-medieval to modern date and Ordnance Survey mapping indicates that field boundaries have been straightened and new ones added to form more regular fields. Fields south of Holme Nook Farm, Abbey Hill, Derby (HDR3157) have been impacted by modern development, although the boundaries themselves remain largely intact.
- 'Very large post-war fields'. Fields east of Allestree Park, Allestree, Derby (HDR3469) are the result of late 19th century to modern boundary loss. In places post and wire fencing demarcate temporary fields which have impacted the intrinsic historic landscape character, although the presence of shallow linear earthwork banks provides an element of time depth. The field north of Holme Nook Farm, Abbey Hill, Derby (HDR3158) is the result of modern changes to previously enclosed land.

#### **Historic woodland**

- 4.6.15 There is a narrow block of deciduous woodland west of Breadsall (south of Croft Lane) that has sinuous boundaries which is shown on historic Ordnance Survey maps to be present in the 1880s (HDR3155), but which has been classified as secondary woodland.
- 4.6.16 Camp Wood (north of Breadsall) possibly has medieval/ post-medieval origins. It is shown in various states of survival on historic Ordnance Survey maps from the 1880s (HDR6218). It retains sinuous boundaries, but it has been impacted by the construction of the A38 trunk road in the early 1970s which has severed the wood.
- 4.6.17 Woodland (broadleaf plantation) is also present along communication route corridors, including along the disused Derbyshire and North Staffordshire Extension railway line south of Breadsall (HDR6191) (Willow Holt Plantation, The Slip and other woodland south of Breadsall) and between the modern Croft Lane spur road and Alfreton Road (Woodland west of Croft Lane) (HDR3156). There is a modern plantation next to Derby Corporation Water Works (Plantation south of Camp wood, Little Eaton) (HDR6219) and west of Breadsall (HDR6208).

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## Summary

- 4.6.18 Little Eaton junction retains historic time depth represented by medieval earthworks, post-medieval enclosure field boundaries and farmland that are present outside the historic settlement cores; and the surviving elements of the historic transport network that helped to foster the industrial revolution. Historic character units that have been the subject of more extensive change, through severance by modern transportation routes, the introduction of modern industrial premises, including water works; and landfill which are situated on the east bank of the River Derwent. The only exception to this is the field systems situated to the west of Breadsall which have post-medieval origins.
- 4.6.19 The assessment area is characterised by the landscape in which it sits and its association with the Industrial Revolution. It is semi-rural and contains evidence of agricultural as well as industrial use and is a strategic meeting point for new modes of transport that emerged in the late 18<sup>th</sup> and 19<sup>th</sup> century. In respect of the Historic Landscape Characterisation, the following landscape areas are considered to characterise the landscape that embodies the values for which the WHS is inscribed:
- Historic and 20th century strategic communication routes.
  - Post-medieval fields and enclosed land.
- 4.6.20 These are assessed in greater depth below. In this respect the assessment area contributes and is part of the physical attributes which embody the values for which the WHS is inscribed.
- 4.6.21 The assessment area is located at a distance from the main industrial settlements of Belper, Derby, Cromford, Milford and Matlock Bath. Darley Abbey is the closest.

## 4.7 Nationally and locally designated sites and non-designated heritage assets

### Nationally designated heritage assets

- 4.7.1 These assets are shown on Figures 4 and 5.

### *World Heritage Site*

- 4.7.2 The Derwent Valley Mills WHS is a nationally designated heritage asset. The inscription criteria, Attributes of OUV, Integrity and Authenticity are detailed below.

### *Monitoring views*

- 4.7.3 Fifty monitoring views have been identified within the Derwent Valley Mills WHS as being sensitive and needing to be closely monitored to ensure the OUV of the Derwent Valley Mills is maintained, and their setting is preserved and enhanced. These include views of Masson Mills, Cromford Mill, Cromford canal, Willersley Castle, Belper Mills, River Gardens, Belper housing, Darley Abbey and Silk Mills. None of the monitored views have any visual relationship with Little Eaton junction and therefore these have not been assessed any further as the Scheme would have no impact upon them.

### *Scheduled monuments*

- 4.7.4 There is one scheduled monument within the assessment area. This is a small monument that includes the remains of Darley Abbey (A212). The scheduled

monument dates from 15th century and does not bear directly upon the OUV of the WHS.

### ***Listed buildings***

4.7.5 The study area contains 63 listed buildings, including:

- Two grade I listed buildings or structures: Darley Abbey Mills (South Complex) Long Mill, Middle Mill, East Mill, West Mill, Engine House and Chimney, Tollhouse, Bobbin Shop and Drying Shed (A198) and Church of All Saints, Breadsall (A163).
- Eight grade II\* listed buildings or structures: Darley Abbey Mills (North Complex) North Mill and Engine House and Boiler House (A200), Darley Abbey Mills (North Complex) Preparation Building and Cottage and workshop (A201), The Old Hall, Breadsall (A161), Allestree Park (A202), Church of St Edmund, Allestree (A210), Old Abbey Building, Darley Abbey (A212), 3-16 Brick Row, Darley Abbey (A213) and 1 and 2, Brick Row, Darley Abbey (A214).
- 53 grade II listed structures, including those associated with Darley Abbey namely housing, stables, church, weir and ancillary buildings and structures; historic farmhouses; one icehouse; one bridge and one war memorial.

4.7.6 Very few of the listed buildings within the assessment area directly convey the OUV of the WHS, apart from those associated with Darley Abbey and Allestree Park. Potential impacts upon listed buildings are considered within the ES (refer to Chapter 6: Cultural Heritage).

### ***Registered Parks and Gardens***

4.7.7 There are no Registered Parks and Gardens located within the study area.

### ***Conservation areas***

4.7.8 The study area contains four conservation areas either fully or partially:

- Little Eaton Conservation Area (A64).
- Breadsall Conservation Area (A61).
- Darley Abbey Conservation Area (A67).
- Allestree Conservation Area (A66).

4.7.9 Only Darley Abbey Conservation Area bears a direct relation to the OUV of the WHS. Potential impacts of the Scheme on these conservation areas are assessed in the ES (refer to Chapter 6: Cultural Heritage).

### ***Other***

4.7.10 There are no Registered Battlefields or Protected Wrecks within the study area.

### ***Locally designated heritage assets***

4.7.11 There are no buildings of local importance within the study area. Potential Scheme impacts on buildings of local importance within 500m of the Scheme boundary are assessed in the ES (refer to Chapter 6: Cultural Heritage).

- 4.7.12 Potential Scheme impacts on individual archaeological sites recorded in the Derbyshire Historic Environment Record (HER) within 500m of the Scheme boundary are considered in the ES (refer to Chapter 6: Cultural Heritage).

#### **Non-designated heritage assets**

##### ***Historic Environment Record (HER)***

- 4.7.13 A 500m search was undertaken from Little Eaton junction. A total of 79 entries were retrieved. Many of these do not directly contribute to the OUV of the WHS. Where they do contribute, entries are not considered individually due to the large volume of HER data. Instead, they are associated with features of the historic landscape identified through the HER and through assessment of the SoOUV for the Property and are therefore considered under 'Historic Landscape'. The Scheme impacts on them as heritage assets are assessed in the ES (refer to Chapter 6: Cultural Heritage).

##### ***Historic Landscape Character***

- 4.7.14 A 500m search was undertaken from Little Eaton junction. Six Historic Landscape Areas were identified. However, the following are considered to convey the OUV of the WHS:

- Historic and 20th century strategic communication routes.
- Post-medieval Fields and Enclosed Land.

- 4.7.15 The above are considered under 'Historic Landscape' for the contribution that they make to the landscape around the Scheme, but are individually assessed in the ES (refer to Chapter 6: Cultural Heritage).

#### **4.8 OUV of the World Heritage Site**

##### **Background development to the statement of Outstanding Universal Value**

- 4.8.1 In 2007 UNESCO asked all inscribed World Heritage properties to prepare Statements of Outstanding Universal Value (SoOUV). These set out clearly what the World Heritage Committee considered to be of OUV and comprised of a brief description of the World Heritage property, the criteria the property was inscribed under and Statements of Authenticity, Integrity and Protection and Management. Properties inscribed before 2007 were asked to prepare Retrospective Statements of OUV using the original documentation. All UK World Heritage Properties now have SoOUV agreed by the World Heritage Committee and these form an important part of the management and conservation regimes protecting the property.
- 4.8.2 The SoOUV clearly sets out in detail the reasons why and the criterion for the WHS having OUV and how the WHS embodies this. It also sets out the Integrity and Authenticity of the WHS, as well as detailing the future protection and management requirements of the WHS.
- 4.8.3 SoOUV: Derwent Valley Mills (1030):

*The Derwent valley, upstream from Derby on the southern edge of the Pennines, contains a series of 18th and 19th century cotton mills and an industrial landscape of high historical and technological significance. It began with the construction of the Silk Mill in Derby in 1721 for the brothers John and Thomas*



*Lombe, which housed machinery for throwing silk, based on an Italian design. The scale, output, and numbers of workers employed were without precedent. However, it was not until Richard Arkwright constructed a water-powered spinning mill at Cromford in 1771 and a second, larger mill in 1776–77 that the "Arkwright System" was truly established. The workers' housing associated with this and the other mills are intact and span 24km of the Derwent valley from the edge of Matlock Bath in the north nearly to the centre of Derby in the south. The four principal industrial settlements of Cromford, Belper, Milford, and Darley Abbey are articulated by the River Derwent, the waters of which provided the power to drive the cotton mills. Much of the landscape setting of the mills and the industrial communities, which was much admired in the 18th and early 19th centuries, has survived.*

*In terms of industrial buildings the Derwent Valley Mills may be considered to be sui generis in the sense that they were the first of what was to become the model for factories throughout the world in subsequent centuries.*

*The cultural landscape of the Derwent Valley was where the modern factory system was developed and established, to accommodate the new technology for spinning cotton developed by Richard Arkwright and new processes for efficient production.*

*The insertion of industrial establishments into a rural landscape necessitated the construction of housing for the workers in the mills, and the resulting settlements created an exceptional industrial landscape. The change from water to steam power in the 19th century moved the focus of the industry elsewhere and thus the main attributes of this remarkable cultural landscape were arrested in time (p.13).*

### **Criteria for inscription**

4.8.4 The Derwent Valley Mills WHS was inscribed under two criteria:

***Criterion ii: Exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town planning or landscape design.***

*The Derwent Valley saw the birth of the factory system, when new types of building were erected to house the new technology for spinning cotton developed by Richard Arkwright in the late 18th century.*

***Criterion iv: Be an outstanding example of a type of building or architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.***

*In the Derwent Valley for the first time there was large-scale industrial production in a hitherto rural landscape. The need to provide housing and other facilities for workers and managers resulted in the creation of the first modern industrial settlements.*

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### **Integrity and Authenticity**

#### **4.8.5 Integrity 2010:**

*The relationship of the industrial buildings and their dependent urban settlements to the river and its tributaries and to the topography of the surrounding rural landscape has been preserved, especially in the upper reaches of the valley, virtually intact. Similarly, the interdependence of the mills and other industrial elements, such as the canals and railway, and the workers' housing, is still plainly visible. All the key attributes of the cultural landscape are within the boundaries. The distinctive form of the overall industrial landscape is vulnerable in some parts to threats from large-scale development that would impact adversely on the scale of the settlements.*

#### **4.8.6 Authenticity 2010:**

*Although some of the industrial buildings have undergone substantial alterations and additions in order to accommodate new technological and social practices, their original forms, building materials, and structural techniques are still intact and easy to discern. Restoration work on buildings that have been in a poor state of repair has been carried out following detailed research on available documentation and contemporary built architectural examples, and every effort has been made to ensure that compatible materials are used. In those cases where buildings have been lost through fire or demolition, no attempt has been made to reconstruct. The overall landscape reflects well its technological, social and economic development and the way the modern factory system developed within this rural area on the basis of water power.*

#### **4.8.7 Protection and Management:**

*A comprehensive system of statutory control operates under the provisions of the Town and Country Planning Act (1990) and the Planning (Listed Buildings and Conservation Areas) Act 1990. A network of strategic planning policies is also in place to protect the Site. There are 13 Conservation Areas falling wholly or partly within the property. 848 buildings within the area included in the List of Buildings of Special Architectural or Historical Interest. There are also nine scheduled monuments.*

*Management responsibility is shared by a number of local authorities and government agencies. The co-ordination mechanism is provided by the Derwent Valley Mills Partnership. This has established a close working relationship between the local authorities involved in the nominated area. This partnership has been responsible for the preparation of a management plan for the property, most recently revised in 2007.*

### **Values and Attributes which convey OUV**

- 4.8.8 The UNESCO Operational Guidelines (p. 22 paras. 82, 83) recommend that the physical attributes which embody the values for which the World Heritage Property is inscribed, be identified in management plans to generate a tool for planning, conservation and education purposes.

- 4.8.9 UNESCO's Operational Guidelines for the Implementation of the World Heritage Convention define attributes as 'a direct tangible expression of the OUV of the property' (UNESCO, 2017: 100). The World Heritage Convention (UNESCO, 1972) is a property-based convention. Attributes that convey OUV are expressed by physical elements and tangible or intangible aspects that must meet the conditions of Integrity and Authenticity.

*'Attributes are aspects which convey or express the OUV of the WHS and which contribute to and enhance understanding of the OUV. The key purpose of identifying attributes is so that they can be protected, managed and monitored and are needed in order to assess planning applications, when considering planning allocations and when planning projects or other interventions.'* (UNESCO, 2017: Paras 88 and 89, and Annex 5).

*'Attributes are a means of understanding how OUV is conveyed, and they enable the definition of the cultural values and significance of a heritage place to society. This 'values-led' approach is recommended as a planning tool for managing World Heritage properties.'* (UNESCO/ ICCROM/ ICOMOS/ IUCN, 2013).

- 4.8.10 Attributes are not themselves individually of OUV, but together they express the OUV of the WHS. A number of attributes expressing the OUV of the WHS have been identified within the Management Plan. Attributes are the direct tangible expression of the OUV of the Property – refer to Table 4.1.

**Table 4.1: Value and attributes identified in the Derwent Valley Mills WHS Management Plan**

Values		Attributes
Value 1	The successful harnessing of natural energy to deliver the power to drive newly devised machines housed in mills to produce goods of superior quality at an unprecedented rate.	Watermills, water courses, mill ponds, aqueducts, culverts, weirs, leats, soughs, launders, waterwheels, mill yards, bleach mills, tentering grounds, warehouses, barracks, counting houses, offices, chimneys.
Value 2	The creation of a new way of life resulting from the need for people to congregate together (in factories) producing goods of superior quality at an unprecedented rate, sometimes in formerly rural (non-urban) locations, with attendant intensification of agriculture for provisioning. In the early 19th century the new way of life was further developed with the adoption of new modes of transportation.	Mill workers' houses (new forms of housing built in planned campaigns), pigsties, allotments, overseers' houses, mill owners' houses and service buildings, mill owners' parks and gardens, clergy houses, shops, chapels, churches, schools, inns, farms, field barns, etc. The relationship of the industrial installations and their dependent housing settlements to the river and its tributaries and to the topography of the surrounding rural landscape has been preserved, especially in the upper reaches of the valley, virtually intact. Similarly, the interdependence of the mills and other industrial elements, such as the canal and railway, and the workers' housing, is still plainly visible.
Value 3	The dissemination of the new technology and new mode of mass production, from the Derwent Valley to other parts of the UK, Europe and North America, prior to the introduction of steam power and the transference of mill development to the coalfields of Lancashire.	A 'relict' industrial landscape, where late 18th and early 19th century industrial development may still be seen in an 18th/19th century agricultural landscape containing evidence of other early industrial activity such as hosiery, iron founding, nail making, quarrying, lead mining and smelting.

Values		Attributes
Value 4	The further development of industry including the introduction of new modes of transportation and utilities.	Canals, canal wharfs, canal bridges, aqueducts, winding holes, weighbridges, tramways, pumping houses, turnpike roads, toll houses, toll gateposts, railways, railway stations, railway bridges, railway cuttings, railway junctions, railway workshops, gas works, metalled roads, paved causeways, street lighting, reservoirs, flood bunds.

#### 4.9 Summary description of heritage assets and attributes that contribute to and convey OUV

##### Heritage assets

##### *Historic landscape*

- 4.9.1 The Derwent Valley Mills WHS has a number of attributes which are features or relationships that embody the values for which the property is inscribed. The values and attributes for the Derwent Valley Mills WHS have been defined and approved by UNESCO and are set out in the Derwent Valley Mills Management Plan. A key attribute that is relevant to the assessment area is the historic landscape in which the Scheme sits and is expressed in the management plan as:

*‘The relationship of the industrial installations and their dependent housing settlements to the river and its tributaries and to the topography of the surrounding rural landscape has been preserved, especially in the upper reaches of the valley, virtually intact.’*

And,

*A ‘relict’ industrial landscape, where late 18th and early 19th century industrial development may still be seen in an 18th/19th century agricultural landscape...’  
(Section 2.6, management plan 2014-2019)*

- 4.9.2 For simplicity, this is referred to as the ‘historic landscape’. This has been assessed as an Attribute that conveys the OUV of the WHS.
- 4.9.3 ES Chapter 6: Cultural Heritage includes a Gazetteer of cultural heritage assets (refer to Appendix 6.2, ES Volume 3). The gazetteer draws on the list of heritage assets included in the WHS Nomination Document and from a search of the HER and other data sources.
- 4.9.4 The key tangible heritage assets within and outside the assessment area that convey the OUV of the WHS are discussed below.

##### *Darley Abbey Mills*

- 4.9.5 This complex of structures forms part of the textile manufacturing site at Darley Abbey which traded under the name of Boars Head Mills. The complex as an entity is exceptional in its completeness of survival, and displays important aspects of the development of fire-proofing technology for textile factories. The 18th and 19th century houses and school rooms in Darley Abbey built or acquired by various generations of the Evans family for their workers are of interest as a group to be compared with the Arkwright settlement at Cromford and the Strutt settlements at Belper and Milford.

- 4.9.6 Darley Abbey Mills as a whole forms part of the closely related network of pioneer textile manufacturing sites in the Derwent Valley. Thomas Evans was an associate of Richard Arkwright of Cromford and the Evans family was related by marriage to the Strutt family who had mills in Belper, Milford and Derby. Darley Abbey sits alongside these settlements in terms of both historic and architectural significance; the mill complex retains all of its major early buildings as well as the 19th century additions many of which are distinguished by the use of iron roofs.
- 4.9.7 For this purpose these attributes are grouped together to form an asset group referred to as 'Darley Abbey Mills Asset Group'. This is not to diminish the individual contribution that each asset makes to the OUV, but it is the combination of all of these attributes that collectively expresses the OUV of the WHS.
- 4.9.8 The following assets relate to Darley Abbey and are as follows (these can be found on Figure 4 and 5):
- Darley Abbey Mills (North Complex) North Mill And Engine House And Boiler House, grade II\* listed building (A200) a multi-component manufacturing complex, forming the northern part of the extensive Boar's Head Mills multi-phase cotton textile factory c1825.
  - The Hollies, grade II listed building (A257), is a villa built by the Evans family for the workers at their textile factory.
  - Church of St Matthew, grade II listed building (A183), 1818 - 1819 built by Moses Wood of Nottingham funded by Walter Evans for workers at their textile factory.
  - Sawmill And Workshop Range and Drying Shed Darley Abbey Mills (South Complex), grade II listed buildings (A266). These are a group of detached buildings forming the south-eastern corner of the extensive cotton textile factory built by the Evans family.
  - 3 - 5, Abbey Yard, grade II listed building (A254), is a terrace of three staff houses for Samuel Evans of Darley Abbey constructed in the late 1830s. The range is one of the last of a series of workers' houses, schools, and a church constructed for the Evans family in the C18 and C19 as part of the planned development of an industrial village.
  - Darley Abbey Mills (South Complex) Long Mill, Middle Mill, East Mill, West Mill, Engine House and Chimney, Tollhouse, Bobbin Shop And Drying Shed, grade I (A198), former manufacturing complex forming southern part of extensive multi-phase cotton textile factory.
  - 1 - 12, Flat Square, grade II listed building (A261), 1792, terrace of mill workers' houses facing each other across the square and linked by a similar range in West Row built by the Evans family.
  - 5 - 27, Mile Ash Lane, grade II listed building (A251), 1795-96, terrace of twelve mill workers' houses by the Evans family. Sited at the main access point off the turnpike road from Derby into the settlement and built on a slight curve, the houses are stepped at each party wall to accommodate the sloping ground.

- 3 - 16, Brick Row, grade II\* listed building (A213), terraced range of mill workers' houses formerly incorporating two school-rooms at second floor level, built by the Evans family. Largely intact rows of privies across passage to the rear.
- 1 - 14, Lavender Row, grade II listed building (A250), late 18th or early 19th century terrace range of mill workers' houses built by the Evans Family.
- Stables And Service Wing to Former Darley Hall, grade II listed building (A253), early and mid-18th century. L shaped range of stables and with detached service block to the north of the site of Darley Hall (demolished 1962) dating from 1727 and extended in the 1760s by Joseph Pickford of Derby.
- Cottages Nos 1 - 4 (Consecutive) and House, grade II listed building (A267), a group of brick built cottages and a three storey house within the boundaries of the mill yard dating from late 18th to mid-19th century built by the Evans family. They form the eastern gateway to the complex.
- Nos 1 - 8 (Consecutive) With Row of Privies Opposite, grade II listed buildings (A262), 1792, together form two sides of the Flat Square to the east these houses form three sides of an open square with a continuous ridge line built by the Evans family. Across West Row is a single storey range of six contemporary brick built privies.
- Nos 1 and 2 Abbey Yard, grade II listed building (A255), these are a pair of brick built cottages forming a continuous range with Darley Hall Stables built by the Evans family. Early-mid 19th century.
- Darley Abbey Mills (North Complex) Building To North West Of Site Known As Fire Station And Building To The East, grade II Listed building (A278), c.1820, they are a pair of buildings forming part of an extensive, multi-phase cotton textile manufacturing complex built by the Evans family of Darley Abbey.
- Darley Abbey Mills (North Complex) Preparation Building And Cottage And Workshop And Cart Sheds To North Of Site, grade II\* listed buildings (A201), two storey terraced range of mill workers' houses facing each other across the square and linked by a similar range in West Row built by the Evans family.
- Deans Field (Mill House), grade II listed building (A264), early to mid-19th century painted brick villa with hipped slate roof formerly Managers House to Evan's paper mill built by the Evans family.
- 10, Darley Street, grade II listed building (A260), is a late 18th and early 19th century group of two pairs of brick built cottages acquired by the Evans family c.1790.
- 1 and 2, Brick Row, grade II\* listed buildings (A214), Built in 1826 as school rooms, designed by Moses Wood of Nottingham. It was commissioned by Walter Evans to replace school rooms in adjacent terrace. It is considered a fine example of a simple monumental school building.
- The White House, grade II listed building (A258), early 19th century, brick built and stuccoed house with hipped slate roof and service wings to side, built by the Evans family.

- Works Adjacent to Nos 11 and 12, grade II listed building (A259), early 18th century, brick built industrial building believed to have early timber trusses. The property was described in sale particulars at the time of the break-up of the Evans estate in 1930 as the estate workshops.
- 1 - 5, Poplar Row, grade II listed building (A265), a terraced range of mill workers' houses built by the Evans family in 1823.
- 3 - 9, New Road, grade II listed building (A256), early 19th century regency villa style cottages arranged as a cluster of four houses built by the Evans family in 1826. From all sides both blocks have the appearance of a pavilion and the elegance of their design with their stuccoed facades is accounted for by their being in direct line of view from the Evans family's own house - the former Darley House (demolished).
- Darley Abbey Weir, grade II listed building (A263). Constructed c.1782 the weir was constructed diagonally across the river Derwent to regulate the flow of water to the Boars Head Mills, and control the direction of its flow downstream. In order to obtain the adequate volume of water, the river was dredged from Allestree Ford, providing the Evans with a high quality sediment by-product to sell as a building material and to Derby Corporation for sanding tram lines in bad weather.

### ***Allestree Park***

- 4.9.9 Allestree Hall is a grade II\* listed building (A202) and associated icehouse (A244) originally built for the Thornhill family of Stanton-in-Peak. The Evans family, who founded the Darley Abbey Mills, took over in 1825. It was during their time that the Hall underwent further work and the park landscape was laid out, including the present lake. The Hall sits within 129 acres of former parkland (A145), referred to as Allestree Park now an eighteen-hole golf course and other recreational facilities including orienteering course, nature trails and fishing. The park descends both from west to east and from north to south. This asset group is located within the buffer zone of the WHS. It is included as it is a secondary building and contains features that relate to the primary significance of the WHS, in this case it is the association with the Evans family and to protect the WHS from development that could damage its setting.

### ***Historic landscape***

- 4.9.10 The historic landscape around Little Eaton junction and within the assessment area has been identified as being a physical attribute which contains many other smaller heritage assets that collectively convey the values for which the WHS was inscribed. Specifically, it has been identified as being 'a 'relic' landscape, where late 18th and early 19th century industrial development may be seen in an 18th/ 19th century agricultural landscape.' The landscape has been modified by human intervention and the individual assets are evidence of this, although some are not obvious or apparent as nature has reclaimed them. The landscape is defined by the floodplain with river meadows through which runs the elevated Midland Mainline railway line which ultimately succeeded the Derby Canal, the remains of which are evident. The River Derwent and the main railway line and the remnants of previous, but now outmoded transport routes of canals and tramways, form the spine of the WHS flanked by

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floodplain and fields. This constitutes one of the key elements of the cultural landscape.



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## **5 DESCRIPTION OF THE SCHEME**

### **5.1 Introduction**

- 5.1.1 The A38 Derby Junctions scheme (referred to herein as 'the Scheme') comprises the grade separation of Kingsway junction, Markeaton junction and Little Eaton junction (see Figure 1) which are the three remaining at-grade junctions on the A38 between the A38/ A5148 junction (near Lichfield) and the M1. A full description of the Scheme is provided in the ES (refer to Chapter 2: The Scheme).

### **5.2 Need for the Scheme**

- 5.2.1 Given its strategic status, the A38 carries significant volumes of north-south long-distance traffic travelling from Birmingham to the M1 at junction 28. Where the A38 passes through the western and northern parts of Derby, local intra-urban trips cross the A38 on roads into the city or use the A38 to travel around Derby. The interaction between strategic and local trips results in delays at the three at-grade roundabout junctions at Kingsway junction, Markeaton junction and Little Eaton junction on the A38 to the west and north of Derby. The Scheme comprises the grade separation of these junctions, namely with the A38 passing through Kingsway junction and Markeaton junction via underpasses, and over Little Eaton junction on embankment.
- 5.2.2 Derby and its immediate surrounding area are expected to accommodate significant housing and employment growth. As a result, the traffic demands on the A38 through Derby are forecast to grow quicker than the national average. Consequently, existing delays at the three at-grade roundabout junctions on the A38 are anticipated to worsen due to increasing levels of traffic.

### **5.3 Scheme objectives**

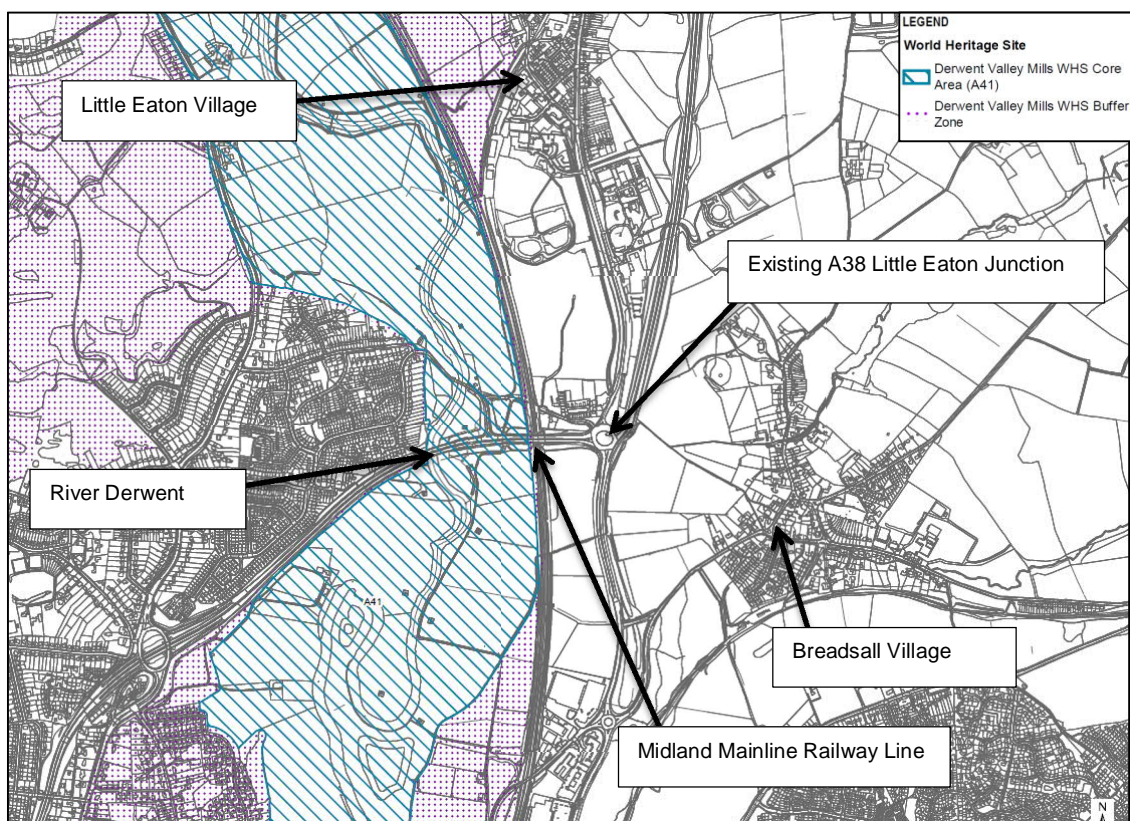
- 5.3.1 The Scheme objectives are detailed in Section 2.2 of the ES (refer to Chapter 2: The Scheme).
- 5.3.2 Highways England's high-level objectives for the Scheme include improving economic competitiveness, the environment and quality of life by reducing congestion in the surrounding urban areas and on the A38 inter-regional road. In addition, it is considered that the Scheme would increase the capacity of the strategic road network and facilitate housing and employment growth within Derby City. The overarching objective is to deliver a Scheme that ensures increased capacity to realise the associated economic and social benefits that the Scheme would bring, whilst also being affordable and delivers high value for money.

### **5.4 Project location**

- 5.4.1 The three proposed grade separated junctions are situated at Kingsway junction (NGR: SK 327 360), Markeaton junction (NGR: SK 334 369) and Little Eaton junction (NGR: SK 364 399). These three junctions span an approximate distance of 5.5km along the A38 to the west and north of Derby (see Figure 1).
- 5.4.2 The Scheme passes through the administrative areas of Derby City Council (DCiC) and Derbyshire County Council (DCC). Erewash Borough Council (EBC) is the planning authority for the section of the Scheme that falls within DCC's administrative area.

- 5.4.3 As detailed in para. 1.1.4, Kingsway and Markeaton junctions are not within the Derwent Valley Mills WHS or the associated Buffer Zone and thus these junctions have been scoped out of the HIA. The text below thus focuses upon the Scheme at Little Eaton junction.
- 5.4.4 Little Eaton junction is set in a semi-rural environment, with the Ford Farm Mobile Home Park, the property Fourways, commercial and retail facilities located to the north of the existing junction. The Derby Garden Centre occupies the space between the A38 and the B6179 to the north of the junction (accessed off the B6179). The eastern edge of Breadsall village is located approximately 400m to the south-east of the existing junction, whilst the southern edge of Little Eaton village is located approximately 900m to the north of the junction. The A38 to the west of the existing junction crosses over the River Derwent and the Midland Mainline railway line. It is at this point that the existing Little Eaton junction (and the Scheme) is located within the Derwent Valley Mills WHS – refer to Figure 6.

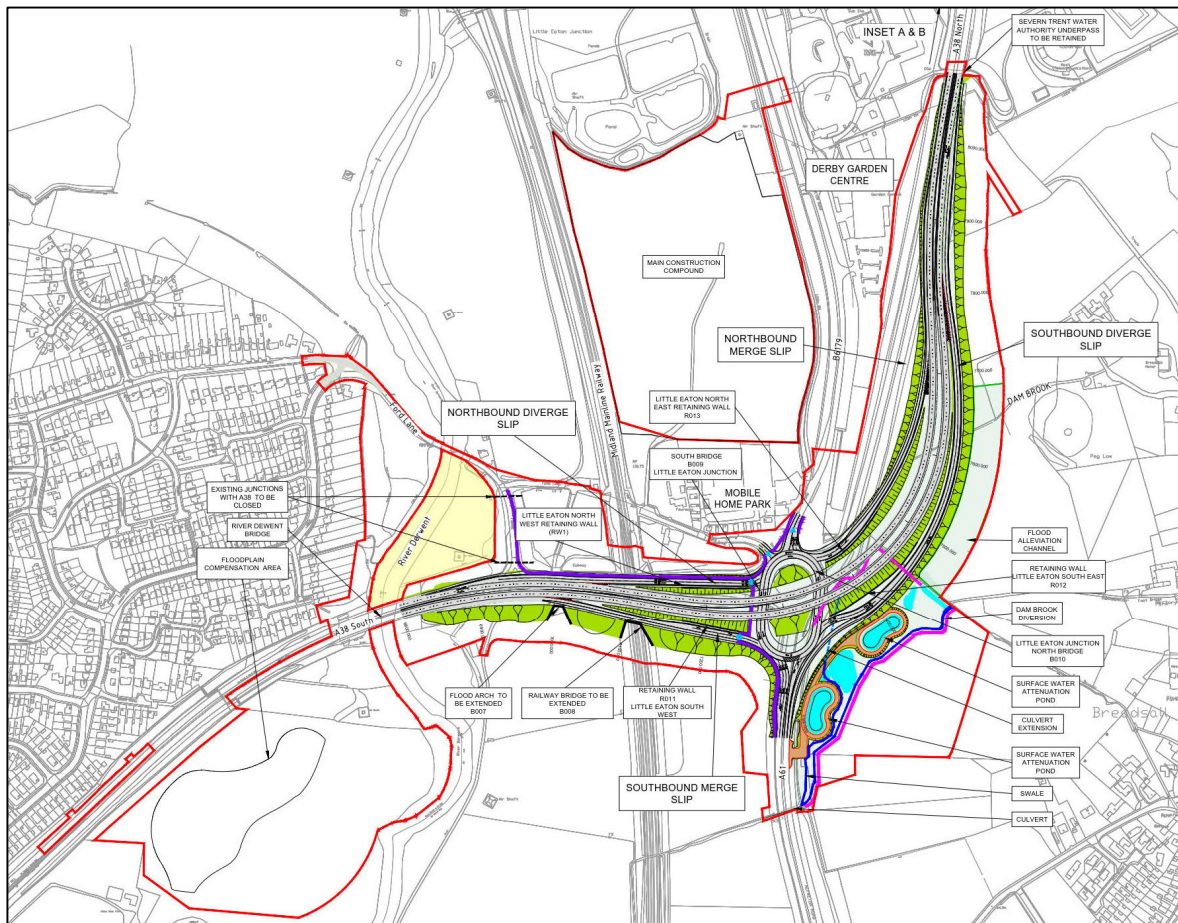
**Figure 6: Existing Little Eaton junction in relation to the Derwent Valley Mills WHS**



## 5.5 Description of Scheme

- 5.5.1 The preferred route for the Scheme was confirmed by the Secretary of State on 31 January 2018. A description of the proposed junction improvements at Little Eaton junction is provided below (refer to Figure 7 – also refer to ES Chapter 2: The Scheme).

**Figure 7: Scheme design - Little Eaton junction**



5.5.2 The proposed Little Eaton junction (refer to Figure 7) would comprise an enlarged roundabout at existing ground level with the A38 being on an embankment and passing above the roundabout on two overbridges to the east and south of the existing roundabout. The existing northbound carriageway would form the northbound slip roads. Commencing at the southern tie in, the proposed A38 would swing to the south of the existing A38 immediately after crossing the River Derwent bridge (which would not be affected by the Scheme), and pass over a Flood Relief Arch/ Accommodation Bridge which would be extended. Continuing north, the existing railway bridge would be extended to the south to carry the widened A38 cross section. The existing northbound carriageway would be retained on the railway bridge and form the northbound diverge slip road.

5.5.3 The A38 mainline would pass over the new roundabout on two bridges on embankment. The new A38 mainline would be approximately 11m above existing ground level at the highest point on the north side of the junction before quickly dropping down to around 3m above existing ground level. It would be around 9m above the existing roundabout carriageway level on the high side of the mainline. The A38 mainline would continue to the west of the existing A38 and re-join the existing A38 alignment immediately south of the Water Treatment Works Accommodation Bridge, which would not be affected.



- 5.5.4 The Ford Lane access onto the A38 (located between the River Derwent bridge and the Flood Relief Arch/ Accommodation Bridge), would be closed for safety reasons. In order to enable access into the turf production site to the south of the existing A38 (via the Flood Relief Arch Accommodation Bridge), it is proposed that turf vehicles would use Ford Lane to access the area from the A6 Duffield Road. Such access arrangements would also enable Severn Trent Water (STW) to access their facilities in the vicinity of the River Derwent. These additional access arrangements may require some strengthening works to the Ford Lane bridge over the River Derwent. A strengthening assessment would be undertaken which may indicate that no or limited works are needed to the bridge. However, in the worst-case the bridge may need to be closed for up to three months in order to complete such bridge strengthening works (which would not require any works to the bridge footings). In addition, there would be a need to realign Ford Lane and reconfigure the junction with Lambourn Drive.
- 5.5.5 The proposed A38 mainline speed limit would be 70mph, although there would be an advisory speed limit of 50mph for a length of approximately 600m through the proposed junction in both directions.
- 5.5.6 The proposed Little Eaton junction would be provided with appropriate lighting. The new at-grade roundabout and the approaching slip-roads would be provided with overhead lighting columns comprising of approximately 12m high LED luminaires. However, the A38 mainline would not have overhead lighting in order to minimise visual intrusion. Lighting provided at the roundabout would tie in with existing lighting outside the Scheme boundary as applicable. To ensure drivers would be aware of the bend in the road at this location, appropriate signing would be installed along with the provision of solar powered studs integrated within the road pavement – these would indicate the alignment of the road to drivers, noting that these are being used along a stretch of the A38 from Ripley junction (approximately 12km north of Little Eaton junction) to junction 28 of the M1.
- 5.5.7 Appropriate facilities for pedestrians and cyclists would be provided at the proposed Little Eaton junction as follows:
- NR54 would cross the new proposed southern slip roads (using a controlled toucan crossing) and use the bridge to pass under the mainline A38. An uncontrolled crossing would be provided from the section of the NR54 that runs along the B6179 to provide access to the other side of the road.
  - The footpath and cycleway (FP No. 23) from Ford Lane to the junction along the northern side of the A38 would be retained.
  - The Derwent Valley Heritage Way (FP No. 7) would pass beneath the A38 via the Flood Relief Arch which would be extended.
  - Breadsall FP No. 3 would be subject to a minor diversion outside the new fence line and join Breadsall FP No. 1.
  - All other existing pedestrian and cyclist routes would be retained.
- 5.5.8 The proposed Little Eaton junction would be provided with an appropriate highway drainage system that would incorporate two attenuation ponds and treatment.

- 5.5.9 A short section of Dam Brook located adjacent to the east of the existing A38 would need to be diverted. In addition, a flood alleviation channel would be provided to connect a surface watercourse downstream of Breadsall Manor with the realigned Dam Brook.
- 5.5.10 The Environment Agency Flood map data indicates that Little Eaton junction is located within the extent of the extreme flood outline, known as Flood Zone 2, with the western elements falling within or adjacent to Flood Zone 3. In order to mitigate flood risks at Little Eaton junction it would be necessary to provide a suitable flood risk mitigation strategy – namely to replace the volume of floodplain lost due to the Scheme on a like for like basis, by extending the floodplain to the west of the River Derwent and south of the existing A38 – refer to Figure 8.

**Figure 8: Floodplain compensation area (illustrative design)**



- 5.5.11 Figure 8 indicates that the existing edge of the floodplain would be extended by excavation to form a natural landform profile. Following excavation the land would be reinstated as farmland and returned to the landowner for continued agricultural use. There would be no long term management requirements associated with the area.
- 5.5.12 Numerous locations for floodplain compensation have been subject to evaluation (refer to ES Chapter 3: Scheme History and Assessment of Alternatives). The appraisal indicated that the location to the west of the River Derwent was the only option assessed that was able to adequately provide floodplain compensation on a like for like basis. Given that this location is within the WHS, this option was only taken forward for

inclusion within the Scheme design on the basis that the landform created by excavations could be naturalised, such that it would not have a significant effect on the WHS. The landform design has been developed with input from landscape, ecological and cultural heritage specialists (refer to Section 6) with the aim that it creates a naturalistic profile that blends in with the surrounding valley profile, as well as enabling the land to be returned to agricultural use. It is the intention that following profiling and re-establishment of agricultural grassland, it would not be apparent that any works had taken place on the site.

5.5.13 In order to provide an illustration of the floodplain compensation area following works completion, two visualisations have been prepared (refer to Appendix 1 which show views of the area before and after the proposed works). Viewpoint 1 is the view from the Derwent Valley Heritage Way at a location approximately 400m to the south of the proposed floodplain compensation area. Viewpoint 2 is also a view from the Derwent Valley Heritage Way, but at a location approximately 150m to the south-east of the proposed floodplain compensation area. Both visualisations illustrate that the floodplain compensation area would appear as a natural agricultural area, similar to current conditions.

## **5.6 Scheme phases and potential impacts**

5.6.1 As detailed in ES Chapter 2: The Scheme, if the DCO is granted, preliminary works are planned to start in late 2020, with the main construction works planned to start in 2021. Construction works would commence across all three junctions, with Kingsway junction being completed first, followed by Little Eaton junction, with Markeaton junction being the last to become operational. The Scheme would be fully open to traffic in 2024. With regard to excavation works within the floodplain compensation area, these are estimated to take approximately 10 weeks to complete.

5.6.2 For the purposes of the HIA and ES, the construction phase is defined as the temporary activities involved in building the Scheme, and the subsequent permanent presence of the Scheme once constructed. The operational phase comprises the situation when the Scheme is being used by traffic.

5.6.3 Physical impacts upon assets would only occur during the construction phase; impacts upon the assets' setting would arise during both the construction and operation phases. Impacts upon setting may be either positive or negative.

5.6.4 Construction of the Scheme has the potential for adverse impacts upon cultural heritage, including:

- Partial or total removal of heritage assets, including archaeological remains, within the Scheme footprint.
- Temporary impacts upon the setting of heritage assets, including those that convey the attributes of OUV.
- Permanent impacts upon the setting of heritage assets, including those that convey the attributes of OUV.
- Changes to monitored views.
- Noise and vibration.

- 
- 5.6.5 Operation of the Scheme has the potential for adverse impacts upon cultural heritage, including
- There is potential for impacts on the setting of historic building assets during Scheme operation from lighting and any increases in noise levels.
  - Changes to the setting of assets, including those that convey the attributes of the WHS OUV.
- 5.6.6 It is highly unlikely that the Scheme would be demolished after its design life as the road would have become an integral part of the nationally important infrastructure. The Scheme is designed as permanent infrastructure. Demolition of the Scheme is not, therefore, considered further in this HIA.

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## 6 MITIGATION MEASURES

- 6.1.1 Where possible, proportionate measures to avoid or minimise direct impacts on cultural heritage assets have been embedded within the Scheme design.
- 6.1.2 Throughout the Scheme design process, avoidance of heritage assets by refinement of the Scheme alignment and associated features has been undertaken, including avoidance of options that would entail new structures within the Derwent Valley Mills WHS. These changes have been made to take account of heritage assets which were already known.
- 6.1.3 Measures to minimise the physical impact of the Scheme, and to conserve or enhance the permanent setting of heritage assets, have been embedded in the Scheme design as follows (that relate specifically to Little Eaton junction):
- The Scheme design has been developed to reduce land-take within the WHS with the River Derwent Bridge being unaffected at Little Eaton junction.
  - The Scheme would result in the closure of the existing carriageway associated with the left in/ left out access onto the A38 from Ford Lane (located within the WHS). This area would be downgraded to prevent vehicle access, appropriately landscaped and provided with pedestrian and cyclist facilities to enable continued access to adjacent public rights of way routes. These downgrading works would have a beneficial impact upon the setting of the WHS.
  - The Scheme design has been developed to reduce visual intrusion of new highway sections within and on the approach to the WHS. In order to minimise lighting impacts at Little Eaton junction, no lighting columns would be located along the A38 mainline (solar powered studs integrated within the road pavement would be used indicate the alignment of the road to drivers). However, 12m high LED luminaires would be provided at the new at-grade roundabout and the approaching slip-roads, with the lights angled down at 5° to reduce impacts on the surrounding landscape.
  - Timber noise and visual screening barriers (together with appropriate landscaping) would be installed along the northbound mainline A38 in the vicinity of Ford Lane Mobile Home Park, and along the southbound mainline A38 and associated diverge slip-road as the Scheme passes Breadsall and its conservation area in order to reduce visual intrusion and noise impacts.
  - The floodplain compensation area at Little Eaton junction is located within the Derwent Valley Mills WHS. Given the sensitivity of the site, very careful consideration has been given to the final landform created by the required excavation works (refer to Figure 8 and the visualisations in Appendix 1). The landform design has been developed with input from landscape, ecological and cultural heritage specialists with the aim that it creates a naturalistic profile that blends in with the surrounding valley profile, as well as enabling the land to be returned to agricultural use. It is the intention that following profiling and re-establishment of agricultural grassland, it would not be apparent that any works had taken place on the site. No residual spoil heaps would be left at the site.



- The Scheme would be provided with landscape planting that aims to integrate the Scheme into the surrounding landscape - refer to ES Chapter 7: Landscape and Visual. The landscape design takes into account cultural heritage assets, including the Derwent Valley Mills WHS, and the Breadsall Conservation Area.

6.1.4 Measures to avoid or minimise potential physical impacts arising from construction activities include:

- A Construction Environmental Management Plan (CEMP) would be prepared and implemented by the selected construction contractor for the duration of the Scheme construction phase. Measures would be included within the CEMP that aim to minimise the visual intrusion of the works.
- Locating construction compounds outside of culturally sensitive locations. This includes avoiding designated and non-designated assets (located on ground that has previously been disturbed), whilst also avoiding locations within the Derwent Valley Mills WHS.
- The layout of construction compounds aims to reduce temporary impacts on the settings of heritage assets and to minimise visibility in views from, and including the Derwent Valley Mills WHS. Such areas would be returned to the landowners in the same condition that existed prior to construction.
- The proposed access into the main construction compound at Little Eaton junction would need to cross over the remains of the former Derby Canal (Little Eaton branch). In order to avoid direct effects upon the former canal, a temporary bridge would to be used to cross the canal which would not require any disturbance or earthworks to the former canal. On completion of the works, the temporary bridge would be removed and the area appropriately restored.

6.1.5 A staged programme of archaeological mitigation would be implemented in accordance with advice in DMRB Volume 11 Section 3 Part 2 (Highways England, 2007), and Volume 10 Section 6 Part 1 (Highways England, 2001) in advance of Scheme construction (undertaken during preliminary works). The programme would comprise measures to protect archaeological remains in-situ and/ or to record archaeological remains through investigation, prior to the construction of the Scheme.

6.1.6 The archaeological mitigation programme would be conducted with full consideration of the Updated Research Agenda and Strategy for the Historic Environment of the East Midlands (Knight et al., 2012), and the Derwent Valley Mills World Heritage Site Research Framework (Knight et al., 2016).

6.1.7 Further details regarding the archaeological mitigation strategy are included in the ES (refer to Chapter 6: Cultural Heritage).

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## 7 ASSESSMENT AND EVALUATION OF SCHEME IMPACTS

### 7.1 Introduction

7.1.1 As stated in paragraph 3.7.1 and 3.7.2, in accordance with the ICOMOS Guidance (ICOMOS, 2011), this HIA involves the following key elements:

- Identification of heritage potentially at risk and its contribution to the OUV of the WHS.
- Identification of how change or development would impact on OUV, positively or negatively.
- Identification of how change or development would impact on Integrity and Authenticity, positively or negatively.
- Consideration of how adverse impacts of the Scheme might be mitigated.
- Assessment of potential impacts of the scheme on heritage assets that convey the Attributes of OUV.
- Assessment of potential overall impacts on each of the Attributes of OUV of the WHS.

7.1.2 A qualitative assessment has been undertaken of the likely impact of the Scheme on the fabric and setting of the designated and non-designated heritage assets that contribute to OUV. Many of the heritage assets identified are considered within the ES and this should also be referred to. This characterises the heritage resource and identifies assets that convey values and Attributes that express the OUV. The potential impacts of the construction and operation of the Scheme on the fabric and setting of the designated and non-designated assets that contribute to OUV is assessed.

7.1.3 The impact is assessed in:

- A description that outlines the heritage assets or attribute of OUV and its setting.
- A matrix summary of assessment to enable rapid analysis of results.
- Conclusion and summary.

7.1.4 The assessment takes account of international, national and local planning policies and guidance, and takes into account the mitigation measures detailed in Section 6.

7.1.5 The tables below consider the potential Scheme impacts upon the following physical attributes that convey the OUVs of the WHS:

- The Darley Abbey asset group (refer to Table 7.1).
- Allestree Hall and Park (refer to Table 7.2).
- Historic Landscape (refer to Table 7.3).

7.1.6 Thereafter, this section considers the Scheme impacts and effects upon the Attributes of OUV, Integrity and Authenticity, and an overall summary of the significance of Scheme effects upon the Derwent Valley Mills WHS.

**Table 7.1: Potential Scheme effects on Derwent Valley Mills WHS OUVs – Darley Abbey Asset Group**

<b>Darley Abbey Asset Group</b>	
<b>Designation:</b>	Listed Buildings and Conservation Area
<b>Reference IDs:</b>	A200, A257, A183, A266, A254, A198, A261, A251, A213, A250, A253, A262, A255, A278, A201, A264, A260, A214, A258, A259, A265, A256, A263 and A67.
<b>Constituent elements of Asset Group</b>	
<p>Listed buildings within the Asset Group comprise 25 listed buildings entries (some containing more than one listed buildings) including:</p> <ul style="list-style-type: none"> <li>• One grade I listed building – Darley Abbey Mills (South complex).</li> <li>• Four grade II* listed buildings – Darley Abbey Mills (North Complex and associated buildings), 1 and 2 and 3 - 16 Brick Row.</li> <li>• 20 grade II listed buildings (mills buildings and housing).</li> <li>• 1 Conservation Area – Darley Abbey.</li> </ul>	
<b>Description</b>	
<p>The Asset Group is focussed on Darley Abbey, approximately 2km north of the centre of Derby. The Asset Group includes the village which is located on the west banks of the River Derwent and the mill complex which is located on the east bank of the river. The Mill complex is located on a parcel of land that is bounded by the River Derwent to the north and west inside the wide meander of the river that sits as a horseshoe around the mill complex. The mill buildings are situated either side of Old Road that links the complex via the toll bridge to the village of Darley Abbey where the mill workers dwellings are located.</p> <p>This complex of structures forms part of the textile manufacturing site at Darley Abbey which traded under the name of Boar's Head Mills. The complex as an entity is exceptional in its survival, and displays important aspects of the development of fire-proofing technology for textile factories. The 18th and 19th century houses and schoolrooms in Darley Abbey built or acquired by various generations of the Evans family for their workers are of interest as a group. Together the group forms a collection that has value that reflects the world-wide status of Derby in the 18th and 19th centuries.</p> <p>Darley Abbey Mills as a whole forms part of the closely related network of pioneer textile manufacturing sites in the Derwent Valley. Thomas Evans was an associate of Richard Arkwright of Cromford and the Evans family was related by marriage to the Strutt family who had mills in Belper, Milford and Derby. Darley Abbey sits alongside these settlements in terms of both historic and architectural significance. The mill complex retains all of its major early buildings as well as the 19th century additions many of which are distinguished by the use of iron roofs.</p>	
<b>Condition of the Asset Group</b>	
<p>The condition of the assets within the group varies. Although the nature of the industries that once inhabited the site has changed since the mills closed down, it remains a place of work and activity with various new uses for the buildings and the establishment of new industries.</p> <p>The general condition of some of the buildings, coupled with poor quality additions, alterations and ad hoc parking do detract from the uniformity of the mill complex and its significance.</p> <p>Much of the housing within the Asset Group is in private ownership and this is evident in many of the small, incremental changes that have happened over time. The houses are largely in good condition.</p>	
<b>Attributes of setting</b>	
<p>Darley Abbey is a relatively secluded settlement that nestles in the wooded banks and river plain of the River Derwent. The complex feels separate from the surrounding landscape with the position of the mill buildings creating a compact, self-sufficient and therefore inward looking complex that was built for practical reasons next to the river rather than for any aesthetic qualities. Today it is a pleasing arrangement that is enhanced by the toll bridge and weir in an attractive riverside setting.</p> <p>St Matthew's Church and the Engine House Chimney are prominent features that punctuate the skyline in views to and including Darley Abbey. St Matthew's Church is built on higher land to the west of the mill complex and to the north of the historic core of housing. Prior to the development of housing in the early 20th century, the church would have been a more prominent feature in views to and from the historic settlement and the mill complex. It would have been a dominating feature overlooking the mill workers housing and the mill. The finials atop the tower of St Matthews are visible from a number of locations beyond Darley Abbey.</p> <p>As Historic England's GPA3 is clear the extent of setting is not limited to intervisibility and other factors can</p>	

influence the way in which we experience a heritage asset in its setting, for example our understanding of historic relationship between places. In Darley Abbey the experience along the Derwent Valley Heritage Way from the industrial mill complex, along Haslam's way and north along the eastern edge of the River Derwent provides a contrast between the industrial settlement and the open landscape of the Derwent Valley, which is an attribute of OUV. This is discussed in greater detail in the assessment of 'Historic landscape'.

#### **Integrity of the Asset Group**

##### **Wholeness**

All the elements of this Asset Group are located within the WHS.

##### **Intactness**

The mill complex operated continuously throughout the 19th century and through to the middle of the 20th century. However, textile manufacturing ceased in 1970. The 20th century saw the culverting and infilling of leas, the removal of machinery, including large engines, wheels and gearing from the mill buildings and the conversion of the buildings and structures to other uses. However, the buildings in terms of their presence and materiality still enable the complex and the relationship to the river and the housing to be read as it once was.

The housing built by the Evans family remains as dwellings albeit with some alterations. Again, these are still legible as housing.

Consequently, the integrity of the Asset Group has been largely preserved as the relationship between the industrial buildings and their dependent urban settlement to the river remains.

##### **Threats**

There is a high degree of protection as many of the building are listed and the area is designated a conservation area. The threats mainly consist of small incremental changes that do not require any consent.

#### **Authenticity of the Asset Group**

Some of the buildings have undergone alterations and additions to accommodate new uses following the demise of the textile industry. This affects the authenticity of the Asset Group. However, the original form, and materials are relatively intact and legible.

#### **Contribution to the Attributes that convey the OUV of the WHS**

The buildings within this Asset Group convey the values and attributes of OUV in the following ways:

**Value 1: The successful harnessing of natural energy to deliver the power to drive newly devised machines housed in mills to produce goods of superior quality at an unprecedented rate.** This value is embodied in the physical attributes that are the mills, the River Derwent, the weir, chimney and many others.

**Value 2: The creation of a new way of life resulting from the need for people to congregate together (in factories) producing goods of superior quality at an unprecedented rate, sometimes in formerly rural (non-urban) locations, with attendant intensification of agriculture for provisioning. In the early 19th century the new way of life was further developed with the adoption of new modes of transportation.** This value is embodied in the physical attributes that are the mill workers housing, overseers' houses, mill owners' houses, churches and schools. They represent the relationship of the industrial installations and their dependent housing settlement to the river.

#### **Contribution to the Integrity of the WHS**

The Asset Group contains a mill complex and associated workers housing with the River Derwent as an integral part and is still plainly visible. The rural landscape is not readily appreciable from within the mill complex or housing, but is experienced on approach from the east, albeit it has suffered from 20th century development that urbanises the approach. As such, it contains physical attributes which convey the integrity of the OUV of the WHS.

#### **Contribution to the Authenticity of the WHS**

The Asset Group reflects well the technological, social and economic development and the way the modern factory system developed within a rural area based on water power.

#### **Assessment of significance and value**

The Asset Group's contribution to OUV is related to the physical attributes which embody the values for which the Derwent Valley Mills WHS is inscribed.

In accordance with Table 3.1, the Darley Abbey Asset Group is assessed as being of **Very High value**.

#### **Existing baseline**

The Darley Abbey Asset Group is accessed off the A38 from Abbey Hill/ Allestree junction to the north-west, other access from the west is frequently via bridges over the A38. The A38 is not visible and not intrusive.

The existing A38 is assessed as having <b>No</b> impact on Attributes of OUV of the WHS conveyed by this Asset Group, resulting in a <b>Neutral</b> effect.		
<b>Assessment of impact of Scheme</b>		
Due to the distance of Darley Abbey from the Scheme, and the intervening built environment, it is assessed that the Scheme would result in <b>No Change</b> to either fabric or setting of this asset group.		
<b>Significance of effect</b>		
Taking account of the Very High value of the asset and in accordance with Table 3.3, the overall significance of effect of the Scheme on Darley Abbey Asset Group would be <b>Neutral</b> (derived from <b>No Change</b> to a <b>Very High value</b> asset).		
<b>Proposed mitigation</b>		
No additional mitigation is proposed (other than the measures detailed in Section 6), as there are no direct physical impacts upon these assets.		
<b>Value of Darley Abbey Asset Group</b>		Very High
Impact of the existing A38 on the physical attributes that convey the values of OUV expressed by the Asset Group		None
Significance of effect of existing A38 and associated roads and infrastructure on the physical attributes that convey the values of OUV expressed by the Asset Group		Neutral
<b>Scale and severity of change/ impact of Scheme</b>	Fabric	No Change
	Setting	No Change
<b>Significance of effect of Scheme, taking into account embedded mitigation (design)</b>		Neutral
<b>Significance of effect of Scheme, following proposed additional mitigation (residual effect)</b>		Neutral

<b>Table 7.2: Potential Scheme effects on Derwent Valley Mills WHS OUVs – Allestree Hall and Park</b>	
<b>Allestree Hall and Park</b>	
<b>Designation:</b>	Listed Buildings within Buffer Zone of the WHS
<b>Reference IDs:</b>	A202, A244 and A145
<b>Constituent elements of Asset Group</b>	
<p>Listed buildings within this asset group comprise:</p> <ul style="list-style-type: none"> <li>• Allestree Hall (grade II*).</li> <li>• Ice house (grade II).</li> <li>• Allestree Park designed landscape (non-designated).</li> </ul>	
<b>Description</b>	
<p>The Asset Group is focussed on Allestree Hall which is approximately 1.5km north-west of Little Eaton junction and approximately 4.5km north of the centre of Derby. Allestree Park is located to the north of Allestree.</p> <p>The Asset Group includes the grade II* listed building of Allestree Hall, its listed icehouse and its Park. It is located within the WHS buffer zone. At the heart of Allestree Park is Allestree Hall (A202) which is a grade II* listed building originally built for the Thornhill family of Stanton-in-Peak. It was designed by the prestigious architect James Wyatt and is of three storeys and five bays with a central ionic columned portico. It replaced an earlier building on the site. The family never occupied the Hall and it was left to John Giradot to complete the building in 1805. The Evans family, who founded the Darley Abbey Mills, took over in 1825. It was during their time that the Hall underwent further work and the park landscape was laid out, including the present lake. The Hall retains the compact courtyard of stables and coach house together with adjoining walled garden. There is also a lodge on the eastern approach to the Hall.</p> <p>The significance of Allestree Hall lies in its architectural interest as a late 17th - early 18th century building set within a designed landscape. The historic interest lies in its association with the Evans family. Allestree Hall and Park are situated on the slopes of the Derwent Valley. The Hall's association with the Evans family and Darley Abbey Mills have led to the assets being included within the buffer zone of the WHS. The setting contributes to its significance.</p>	
<b>Condition of the Asset Group</b>	
<p>Allestree Park was identified as being at risk and included in Historic England (formerly English Heritage) Heritage at Risk Register in 2010. It remains on the list. Derby City Council continues to maintain it and the land, although they have recently attempted to sell it. It remains in a semi-derelict condition with many of the original fittings, including decorative fibrous plasterwork now removed by the council for safe storage. The Hall now awaits a comprehensive scheme of renovation and beneficial re-use with the council planning to re-market it.</p>	
<b>Attributes of setting</b>	
<p>The Hall sits within 129 acres of former parkland, now an eighteen-hole golf course and other recreational facilities, including orienteering course, nature trails and fishing. Topographically, the park descends both from west to east and from north to south. The steepest slopes are on the western edge of the park. There is evidence of ridge and furrow denoting early use of the land for agriculture during the medieval period. The Park is enclosed by dense woodland to the north-east, east and south-east with an 18 hole golf course to the west. There is 20th century development to the south-east. This has meant that the setting of the Hall is restricted, enclosed and inward looking with few, if any, opportunities for views beyond the trees. There are some glimpsed views in between planting from the principal driveway towards the south-east over to hills on the other side of the Derwent Valley.</p>	
<b>Integrity of the Asset Group</b>	
<p><b>Wholeness</b></p> <p>All the elements of this Asset Group are located within the buffer zone of the WHS. Allestree Hall contains secondary buildings or features that relate to the primary significance of the site i.e. the relationship to the Evans family.</p> <p><b>Intactness</b></p> <p>Allestree Hall has had mixed fortunes since it was built in the late 18th – early 19th century. During its ownership by the Evans family the Hall underwent extensive work and the Park landscape was laid out which included the present lake. The Hall and the Park were sold to a developer in 1928 who planned to build 2,000 houses around the existing golf course. Developments stalled at the advent of the Second World War, but not before houses were</p>	

<p>built on Main, Short and Evans Avenue. The Hall and Park were acquired by Derby City Council after the war in 1946 and constructed a golf course which still surrounds the Hall. In the 1970s there were plans to demolish the Hall as no use could be found for it. It was saved when plans emerged to turn the building into a museum. These plans were later abandoned and the Hall has been empty ever since. The creation of the golf course, the selling off of some land and development around the periphery has led to some alteration to the parkland laid out during the Evans time, including loss of land and changes to setting. But the Hall and its Park are still legible as an early 19th century country house, situated within its own parkland.</p> <p><b>Threats</b></p> <p>The Hall has not had a stable or prolonged use for nearly a century. It is on Historic England's Buildings at Risk Register. There is a high degree of protection afforded to the buildings due to its listed status. The threats consist of long term vacancy and lack of general repair and maintenance and an uncertain future.</p>
<b>Authenticity of the Asset Group</b>
<p>Some of the buildings have undergone alterations and additions to accommodate new uses, but the Hall and Park's relationship to one another is still legible.</p>
<b>Contribution to the Attributes that convey the OUV of the WHS</b>
<p>Allestree Hall was originally built for the Thornhill family of Stanton-in-Peak with the Evans family only acquiring the Hall in 1825 after John Giradot took over the building work in 1805. Although they made changes to the Hall and laid out the Park, the Hall was not designed by them or for them. Despite the Evans family acquiring it at a later date, it is a secondary building and feature within the buffer zone that contributes towards the values and attributes of OUV in the following ways:</p> <p><b>Value 2: The creation of a new way of life resulting from the need for people to congregate together (in factories) producing goods of superior quality at an unprecedented rate, sometimes in formerly rural (non-urban) locations, with attendant intensification of agriculture for provisioning. In the early 19th century the new way of life was further developed with the adoption of new modes of transportation.</b> This value is embodied in the physical attributes as a former home of the Evans family. From the Hall, prior to the woodland maturing around the Park and 20th century development at Allestree it would have been possible for the Evans family to appreciate the topography of the Derwent Valley, its rural landscape alongside the industrial installations such as Darley Abbey Mills.</p>
<b>Contribution to the Integrity of the WHS</b>
<p>Allestree Hall is located on the slopes of the Derwent Valley and forms part of its setting. The rural landscape is appreciable in long views from the driveway towards the eastern slope of the Derwent Valley. As such, it contains physical attributes which convey the integrity of the OUV of the WHS.</p>
<b>Contribution to the Authenticity of the WHS</b>
<p>Allestree Hall reflects the way the modern factory system and industrialist used the rural landscape.</p>
<b>Assessment of significance and value</b>
<p>The Asset Group's contribution to OUV is related to the contribution it makes to the primary physical attributes which embody the values for which the Derwent Valley Mills WHS is inscribed.</p> <p>In accordance with Table 3.1, Allestree Hall is assessed as being of <b>Very High value</b>.</p>
<b>Existing baseline</b>
<p>The Allestree Hall is accessed off the A38 from Abbey Hill/ Allestree junction to the south. The A38 is not visible and not intrusive.</p> <p>The existing A38 is assessed as having <b>No</b> impact on Attributes of OUV of the WHS conveyed by this Asset Group, resulting in a <b>Neutral</b> effect.</p>
<b>Assessment of impact of Scheme</b>
<p>Due to the distance of Allestree Hall from the Scheme, and the intervening built environment, it is assessed that the Scheme would result in <b>No Change</b> to either fabric or setting of this asset group.</p>
<b>Significance of effect</b>
<p>Taking account of the Very High value of the asset and in accordance with Table 3.3, the overall significance of effect of the Scheme on Allestree Hall would be <b>Neutral</b> (derived from <b>No Change</b> to a <b>Very High value</b> asset).</p>
<b>Proposed mitigation</b>

No additional mitigation is proposed (other than the measures detailed in Section 6), as there are no direct physical impacts.

<b>Value of Asset Group Darley Abbey Asset Group</b>		Very High
Impact of the existing A38 on the physical attributes that convey the values of OUV expressed by the Asset Group		None
Significance of effect of existing A38 and associated roads and infrastructure on the physical attributes that convey the values of OUV expressed by the Asset Group		Neutral
<b>Scale and severity of change/ impact of Scheme</b>	Fabric	No Change
	Setting	No Change
<b>Significance of effect of Scheme, taking into account embedded mitigation (design)</b>		Neutral
<b>Significance of effect of Scheme, following proposed additional mitigation (residual effect)</b>		Neutral



**Table 7.3: Potential Scheme effects on Derwent Valley Mills WHS OUVs – Historic Landscape**

<b>Historic Landscape</b>	
<b>Designation:</b>	Within Derwent Valley Mills WHS and buffer zone of the WHS. Includes non-designated assets that contribute to the values of OUV
<b>Reference IDs:</b>	A13, A14, A15, A16, A82, A92, A89, A90, A91, A94, A100, A102, A142, A245, A246, A247, A248 and A249.
<b>Constituent elements of Asset Group</b>	
<p>The historic landscape contains the remains of the physical attributes that illustrate the former uses of the landscape particularly its use as a historic strategic communications route, including:</p> <ul style="list-style-type: none"> <li>• Remains of Derby Canal (A13).</li> <li>• Little Eaton tramway route (A14).</li> <li>• The North Midland Railway (A15).</li> <li>• Dismantled Derbyshire and North Staffordshire Extension (A16).</li> <li>• Derby to Sheffield (via Duffield).</li> <li>• Turnpike Road (A82).</li> <li>• Midland Railway, Ripley Branch (route of) (A92).</li> </ul> <p>Other attributes that convey other uses of the landscape include:</p> <ul style="list-style-type: none"> <li>• Slack's quarry (A89).</li> <li>• Moorside Lane Quarry (A90).</li> <li>• Bleach Works (site of) (A91).</li> <li>• Drum Hill Quarries (A94).</li> <li>• Sluice Gate (A100).</li> <li>• Stockingers Workshop (A102).</li> <li>• Ridge and Furrow in varying degrees of survival (A142, A245, A246, A247, A248, A249).</li> </ul> <p>Historic Landscape Character types:</p> <ul style="list-style-type: none"> <li>• Historic and 20th century strategic communication routes.</li> <li>• Post-medieval fields and enclosed land.</li> </ul> <p>These individual attributes contribute to an understanding of the historic landscape, but are not individually of OUV.</p>	
<b>Description</b>	
<p>The historic landscape is a continuous feature that runs through the length of the WHS. Analysis of historical landscape data extracted from maps, field survey sheets and existing publications shows a landscape that has evolved over time.</p> <p>Unlike some more rural parts of the WHS, the assessment area is characterised by a large amount of 20th century development such as Allestree. These areas are omitted from the WHS and the buffer zone. For the purposes of this assessment the historic landscape is considered to be the area of open land within the floodplain of the River Derwent. The A38, the Midland Mainline railway line and the newer development of Allestree is the limit of what is considered to be the historic landscape that conveys the OUV of the property.</p> <p>The area within the WHS or the buffer zone is predominately open landscape with some settlement included, most notably Darley Abbey and its historic mills, weir and associated settlement and transport networks. To the north of the existing A38, is a mobile home park and beyond this is an area that was a former landfill; this has left scars on the landscape and is omitted from the boundary of the WHS. The WHS boundary follows the floodplain of the River Derwent to the east and keeps close to the road and railway line to the west. It combines natural landscape features with relic manmade features. The vulnerability of the river meadows to flooding led to the abandonment of arable farming, leaving evidence of medieval ridge and furrow, some of which is still visible within the fields.</p> <p>To the south of the A38, the floodplain is generally broad within the assessment area and on the approach to Derby with the river meandering considerably within it. Immediately south of Little Eaton junction the river meadows become less naturalistic with the section between the River Derwent and the Midland Mainline railway line being used to commercially grow turf. This gives the land flat, manicured and tended appearance when in full turf, at other times it is bare soil. The area west of the River Derwent and east of the A38 is an agricultural, open pasture subdivided by hedgerows and historic field boundaries. The land falls down to the River Derwent. From</p>	

the elevated north boundary there are clear views from the north-east round to the south-east across the river and its floodplain. This is rural in character.

The area between the Midland Mainline railway line and the A61 is also agricultural in nature containing remnants of medieval ridge and furrow that extends beyond the A61 towards Breadsall to the east.

At Darley Abbey the riverside meadows lose their natural appearance, becoming the former parkland of Darley House and Darley Abbey Park, playing fields and dominated by industrial estate and urban development filtering out of Derby northwards.

The rural elements of the landscape character contribute considerably to the OUV of this WHS.

Outside of the WHS boundary and buffer zone are the remnants of the Derby Canal. Remains of the canal (A18) can still be seen near Alfreton Road, north of Ford Farm (now Starbucks café) where it is visible as an earthwork, and some structural elements are also recognisable including stone wall lining along the canal sides and the adjacent towpath (appears to be delimited by an overgrown hedge). South of Little Eaton junction roundabout the canal also survives as an earthwork between the A61 Alfreton Road and farmland to the east side, although here it is also greatly obscured by vegetation. A footbridge that carried a public footpath over the canal crosses at this location and the structure is labelled on historic Ordnance Survey maps between 1886 (1:10,560 scale map) and 1993 (1:2500). Although the footbridge has been dismantled, the footings of the canal footbridge can still be discerned in the sides of the canal. To the south the canal bridge that took Croft Lane over the canal has been demolished and replaced by a simple concrete drain, however, the canal is still visible as an earthwork, and on the south side (between the canal and the A61) there appears to be the remains of brick foundations of buildings that possibly belong to the canal wharf next to Croft Bridge as marked at this location on historic Ordnance Survey maps between 1938 and 1969 (1:10,000 and 1:2500 scale).

#### Condition of the historic landscape

The historic landscape appears to be in good condition, although there is attrition of the river meadows with development on the periphery around the principle routes to and from Derby and around settlements, but these areas tend to be excluded from the WHS boundary or buffer zone.

#### Attributes of setting

The immediate setting of the WHS is defined through the adopted buffer zone. This is endorsed by UNESCO. It extends from skyline to skyline at the northern most part of the WHS. As the valley steep sides flatten out at Little Eaton junction, the buffer zone decreases and is drawn tightly around the boundary of the WHS. There is a wider setting that is not plotted on maps that need to be considered when assessing development outside the designated area and buffer zone.

The rural landscape at Little Eaton junction has elements of rural character, but is experienced as a semi-rural landscape. Derby and its northern urban expansion can be seen with the large expanse of 20th century housing at Allestree and the continuous development that follows the western side of the A38 towards Derby. The A38 and the A61 are features of this landscape. The A38 forms a crossing point over the River Derwent and the Midland Mainline railway line. It brings with it a range of other ancillary structures and features such as signage and lighting. However, it is still possible to experience and appreciate the valley setting with wooded banks rising up either side of the valley. The chimney of Darley Abbey Mills is visible as too is the tower of the Church of St Matthew's within Darley Abbey to the south illustrating the evolution of the landscape and providing a contrast between the elements of rural landscape and the industrial exploits of Darley Abbey. The low topography of the floodplain allows prominent buildings such as church towers at Breadsall and within Derby to be seen. Beyond the WHS boundary and buffer zone the 20th century urban development do not contribute to the OUV of the WHS.

#### Integrity of the Asset Group

##### Wholeness

The assessment area contains a small part of the whole WHS.

##### Intactness

Due to the proximity of assessment area to Derby, its development continued into the second half of the 19th century when the railway industry led to a second phase of industrial expansion with growth and urbanisation of Derby. This led to some development to the north of Derby, some of which is visible from within the assessment area. The urban elements as a result of Derby's expansion and role as a second city within Derbyshire are more evident here than elsewhere within the WHS.

In this sense the historic landscape within the assessment area does display some aspects of 'arrested urbanisation' but not to the extent that other parts of the WHS does. The additions of the A38 and the A61 have had an urbanising effect, but the landscape is still legible.

##### Threats

Further development, particularly large housing estates on the wooded slopes of the valley could alter the setting of the valley.

<b>Authenticity of the relic landscape</b>
The landscape reflects the technological, social and economic development of the Derwent Valley and the way the modern factory system developed within this rural area on the basis of water power.
<b>Contribution to the values that convey the OUV of the WHS</b>
<p>The historic landscape and the physical attributes within it embody the following values that convey the OUV of the WHS:</p> <p><b>Value 1: The successful harnessing of natural energy to deliver the power to drive newly devised machines housed in mills to produce goods of superior quality at an unprecedented rate.</b></p> <p>This value is embodied in the physical attributes of the River Derwent and the visible chimney of the Darley Abbey mill.</p> <p><b>Value 2: The creation of a new way of life resulting from the need for people to congregate together (in factories) producing goods of superior quality at an unprecedented rate, sometimes in formerly rural (non-urban) locations, with attendant intensification of agriculture for provisioning. In the early 19th century the new way of life was further developed with the adoption of new modes of transportation.</b></p> <p>This value is embodied in the physical attributes of the river, its tributaries and to the topography of the surrounding rural landscape that has been preserved. It is also conveyed through the remnants of the Derby Canal (A13) that roughly follows the line of the current A61 and the Midland Mainline railway line.</p> <p><b>Value 3: The dissemination of the new technology and new mode of mass production, from the Derwent Valley to other parts of the UK, Europe and North America, prior to the introduction of steam power and the transference of mill development to the coalfields of Lancashire.</b></p> <p>This value is embodied in the physical attributes of the 'relic' industrial landscape where late 18th and early 19th century industrial development may still be seen in an 18th/ 19th century agricultural landscape.</p> <p><b>Value 4: The further development of industry including the introduction of new modes of transportation and utilities.</b></p> <p>This value is embodied in the remnant of Derby Canal that exists adjacent to the A61 within the assessment area; the Midland Mainline railway line and in general the plethora of historic communication routes that are evidenced within the area.</p>
<b>Contribution to the Integrity of the WHS</b>
The relic landscape with the River Derwent and other historic communications such as the Midland Mainline railway line and the canal and the relationship to the surrounding topography of the semi-rural landscape is preserved. As such, it contains physical attributes which convey the integrity of the OUV of the WHS.
<b>Contribution to the Authenticity of the WHS</b>
The historic landscape reflects the way the modern factory system and industrialist exploited the rural formerly agricultural landscape.
<b>Assessment of significance and value</b>
<p>The historic landscape within the WHS embodies all four values which convey the OUV for which the Derwent Valley Mills WHS is inscribed.</p> <p>In accordance with Table 3.1, the historic landscape is assessed as being of <b>Very High value</b>.</p>
<b>Existing baseline</b>
<p>The historic landscape of the assessment area is heavily influenced by the existing A38, although mature screening means that it is not highly visible except when close up and in gaps in screening, although it is audible from many locations. It is an urbanising influence within the semi-rural landscape.</p> <p>The existing A38 is assessed as having <b>Negligible</b> impact on Attributes of OUV of the WHS conveyed by this Asset Group, resulting in a <b>Slight adverse</b> effect.</p>
<b>Assessment of impact of Scheme</b>
<p>There are a number of difference aspects to the Scheme at little Eaton junction that require consideration – these aspects are detailed below.</p> <ul style="list-style-type: none"> <li>• Within the WHS boundary the existing River Derwent Bridge would not be affected. The Flood Relief Arch/ Accommodation Bridge would be extended to the south as would the existing railway bridge. This would allow the A38 to be widened to the south. The railway bridge is not within the WHS. The Derwent Valley Heritage Way/ FP No. 7 would still pass beneath the A38 via the Flood Relief Arch which would be extended. The</li> </ul>

junction with Ford Lane, from the existing A38 between the Flood Relief Arch/ Accommodation Bridge and the railway bridge, would be closed for safety reasons and downgraded - this area would be downgraded to prevent vehicle access, appropriately landscaped and provided with pedestrian and cyclist facilities to enable continued access to adjacent public rights of way routes. Such downgrading works would have a beneficial impact upon the setting of the WHS. To the east of the WHS and the buffer zone, which is drawn very tightly and follows the topographical feature of the Midland Mainline railway line at this point, the Scheme would comprise an enlarged roundabout at existing ground level with the A38 passing above on two roundabout overbridges to the east and south of the existing roundabout. The existing northbound carriageway would form the northbound slip roads. The A38 mainline would pass over the new roundabout on two bridges on embankment. The new A38 mainline would be approximately 11m above existing ground level at the highest point on the north side of the junction before quickly dropping down to around 3m above existing ground level. It would be around 9m above the existing roundabout carriageway level on the high side of the mainline. The A38 mainline would continue to the west of the existing A38 and re-join the existing A38 alignment immediately south of the Water Treatment Works Accommodation Bridge, which would not be affected. The enlarged roundabout and the two new roundabout bridges on embankment are outside the WHS and buffer zone. These would be within the setting of the WHS, however, it would be closely aligned to the existing A38 route. The embankment would be carefully designed to ensure that the visual impacts would be minimal – this includes avoiding the use of lighting columns along the A38 mainline, as well as the provision of appropriate landscaping.

- A short section of Dam Brook located adjacent to the east of the existing A38 would need to be diverted, whilst a flood alleviation channel would be provided to connect a surface watercourse downstream of Breadsall Manor with the realigned Dam Brook. Drainage attenuation for the additional paved area would be provided.
- The main element of the Scheme within the WHS is the requirement for a floodplain compensation area to the west of the River Derwent. The Environment Agency Flood map data indicates that Little Eaton junction is located within the extent of the extreme flood outline, known as Flood Zone 2, with the western elements falling within or adjacent to Flood Zone 3. In order to mitigate flood risks at Little Eaton junction it would be necessary to provide a suitable flood risk mitigation strategy – namely to replace the volume of floodplain lost due to the Scheme on a like for like basis by extending the floodplain elsewhere. Several options for providing such floodplain compensation have been investigated, however, the only option which would be able to satisfy Environment Agency requirements would be the extension of the existing floodplain to the west of the River Derwent and south of the existing A38. The location for the floodplain compensation area is an area that contributes to the OUV of the Derwent Valley Mills WHS through the survival of rural landscape character against the backdrop of the existing A38 and modern urban development that flanks the WHS along its boundary. The area for the floodplain compensation area helps to reinforce the strong contrast of the rural landscape with the historic urban settlement and the relationship to the River Derwent. This piece of land provides a glimpse into how the area evolved and the arrestment of development within the Derwent Valley. The floodplain compensation proposals are mindful of the contribution that this piece of land makes to the OUV of the WHS. The landform design has been developed with input from landscape, ecological and cultural heritage specialists with the aim that it creates a naturalistic profile that blends in with the surrounding valley profile, as well as enabling the land to be returned to agricultural use. It is the intention that following profiling and re-establishment of agricultural grassland, it would not be apparent that any works had taken place on the site. No residual spoil heaps would be left at the site. Construction of the floodplain compensation area would require access from North Avenue which has been included within the Scheme boundary.
- During construction of floodplain compensation area, the movement of traffic and materials would mean some temporary non-permanent impacts (noting that construction activities within the floodplain compensation area would last for approximately 10 weeks). However following construction, the area would be re-seeded and returned to agricultural such that there would be no obvious or discernible change to the way the area is experienced or understood. The rural character would be restored and would continue to contribute to the OUV of the WHS.
- As Historic England's GPA3 is clear the extent of setting is not limited to intervisibility and other factors can influence the way in which we experience a heritage asset in its setting, for example our understanding of the historic relationship between places. In Darley Abbey the experience along the Derwent Valley Heritage Way from the industrial mill complex, along Haslam's Way and north along the eastern edge of the River Derwent provides a contrast between the industrial settlement and the open landscape of the Derwent Valley, which is an attribute of OUV. The experience of the majority of the Derwent Valley Heritage Way would be unaffected by the Scheme, however, for a short period during construction, the walk from Darley Abbey northwards towards the A38 would be changed due to construction activity both at Little Eaton junction and within the area identified for the floodplain compensation area. This construction activity would change the appearance of the landscape and thus the experience of the walk. However, once construction has finished and planting has been established, these impacts would be removed and the way the Derwent Valley Heritage Way is experienced would be restored.
- The archaeological evaluation of the Scheme has identified a number of heritage assets within and adjacent to

the Scheme boundary which contribute to an understanding of the WHS. However, these are not considered to be of OUV in their own right.

- The Derby Canal (A13), Little Eaton branch would be affected by the construction of the drainage ponds east of the southbound diverge slip road at Little Eaton junction, and the associated re-alignment of Dam Brook would physically impact the remains of the canal, including the stone footing of a demolished stone footbridge over the canal. The construction of the temporary access bridge into the main construction compound at Little Eaton junction would potentially impact upon the remains of the canal to the north of Ford Farm (Starbucks café).
- The Derby Canal is identified as a physical attribute that contributes to value 4 for which the property is inscribed. Derby Canal is not of international value in itself, but collectively with other attributes combine to contribute to an understanding of the OUV.
- The Earthwork Hollow (A141) at Holme Nook would be affected by the excavation of the floodplain compensation area and the associated site work.
- Ridge and furrow (A142) would be affected by the new length of haul road from North Avenue to an existing track to provide access to the floodplain compensation area.
- Other ridge and furrow (A245, A246, A247, A248, A249) would be affected by the construction of the Scheme at Little Eaton junction. The construction of drainage ponds, the re-alignment of Dam Brook, topsoil stripping for a temporary soil storage area, the creation of internal haul roads, embankment slip roads at Little Eaton junction would potentially impact upon these buried remains. These assets contribute to the value of the landscape to the OUV of the property. They are not individually of OUV. The impacts on these features, their value, the magnitude of impact and the residual effect are fully reported within the ES Chapter 6: Cultural Heritage.
- The landscape as conveying the historic and 20th century strategic communication routes within it would not be affected by the Scheme. The River Derwent, the Midland Mainline railway line would remain as constant features of the valley landscape.
- The medieval, post-medieval and enclosed land would be affected by elements of the Scheme - this is mainly associated with loss of boundary hedgerows and loss of ridge and furrow, and these elements are which collectively contribute to the attributes of OUV. The floodplain compensation area would also impact the historic landscape character along the River Derwent floodplain. The impacts on individual HLC types of the historic landscape character areas are reported within the ES Chapter 6: Cultural Heritage.

#### Fabric

There is the potential for some physical loss of fabric to some identified non-designated heritage assets that collectively combine to convey attributes of the OUV. These assets in themselves are not of universal value, but contribute to the landscape as an attribute of OUV. It is acknowledged that the loss of physical fabric would lead to some impacts that could be considered to have limited effect on the OUV of the WHS. Given the extent and the scale of the WHS, the impact of the Scheme on the WHS would be **Negligible**.

#### Setting

Much of the Scheme at Little Eaton junction is outside the WHS boundary and buffer zone. There would be some impacts on the historic landscape as a result of development within the setting of the WHS. The raising of the Scheme on embankment would introduce additional urbanising features into the landscape. This would be prominent during the construction period due to the movement of materials, traffic and other temporary features around the boundary of the WHS. Once constructed, the landscaping as part of the embedded design would introduce screening and reduce visual impacts. Given the extent and the scale of the WHS, the impact of the Scheme on the WHS would be **Negligible** to the landscape setting of the WHS.

#### Significance of effect

Taking account of the **Very High value** of the asset and in accordance with Table 3.3, the overall significance of effect of the Scheme on the historic landscape would be **Slight Adverse** (derived from a **Negligible** impact upon a **Very High value** asset).

#### Proposed mitigation

No additional mitigation is proposed, other than the measures detailed in Section 6 which aim to ensure that the setting of the WHS is retained through appropriate landscape planting.

<b>Value of Asset Group Darley Abbey Asset Group</b>	Very High
Impact of the existing A38 on the physical attributes that convey the values of OUV expressed by the relic landscape	Negligible
Significance of effect of existing A38 and associated roads and infrastructure on the	Slight adverse

physical attributes that convey the values of OUV expressed by the Asset Group		
Scale and severity of change/ impact of Scheme	Fabric	Negligible
	Setting	Negligible
Significance of effect of Scheme, taking into account embedded mitigation (design)		Slight adverse
Significance of effect of Scheme, following proposed additional mitigation (residual effect)		Slight adverse

## 7.2 Impacts and effects of Scheme on Attributes of OUV, Integrity and Authenticity

- 7.2.1 A description and assessment of the direct and indirect impacts on Darley Abbey, Allestree Hall and park and the historic landscape as physical attributes that convey the OUVs of the WHS have been considered above. For ease, the baseline and assessment are presented together and to avoid repetition.

### Impacts and effects of Scheme on Attributes of OUV

- 7.2.2 The HIA process has identified heritage assets which contribute to the attributes of OUV and has assessed the impacts and effects of the Scheme on these (taking into account the mitigation measures embedded within the Scheme design). This section considers the potential overall impacts and effects of the Scheme on the values and attributes of OUV, taking into account the results of the detailed assessments.

#### Value 1:

*The successful harnessing of natural energy to deliver the power to drive newly devised machines housed in mills to produce goods of superior quality at an unprecedented rate.*

*This value is embodied in the physical attributes of watermills, water courses, mill ponds, aqueducts, culverts, weirs, leats, soughs, launders, waterwheels, mill yards, bleach mills, tentering grounds, warehouses, barracks, counting houses, offices and chimneys.*

- 7.2.3 The Scheme at Little Eaton junction affects a small part of the 24km long WHS. The River Derwent would not be affected by the Scheme physically. The existing A38 bridge over the River Derwent would remain unaltered. Development to the east of the river would bring change to the existing road network, but would not harm the setting of the River Derwent. The ability to understand and appreciate the successful harnessing of the natural energy during the 18th and 19th century to drive new machines would not be impacted. The chimney of Darley Abbey Mills would still be seen from within the valley and thus the relationship to the river and the machines it once powered would be sustained. Overall, it is assessed that the Scheme would result in **No Change** to this value and the physical attributes that embody the OUV, resulting in a **Neutral** effect.

#### Value 2:

*The creation of a new way of life resulting from the need for people to congregate together (in factories) producing goods of superior quality at an unprecedented rate, sometimes in formerly rural (non-urban) locations, with attendant intensification of*

*agriculture for provisioning. In the early 19th century the new way of life was further developed with the adoption of new modes of transportation.*

*This value is embodied in the physical attributes of mill workers' houses (new forms of housing built in planned campaigns), pigsties, allotments, overseers houses, mill owners' houses and service buildings, mill owners' parks and gardens, clergy houses, shops, chapels, churches, schools, inns, farms, field barns, etc. The relationship of the industrial installations and their dependent housing settlements to the river and its tributaries and to the topography of the surrounding rural landscape has been preserved, especially in the upper reaches of the valley, virtually intact. Similarly, the interdependence of the mills and other industrial elements, such as the canal and railway, and the workers' housing, is still plainly visible.*

- 7.2.4 The Scheme is located away from the main settlements associated with the WHS such as Cromford, Matlock Bath, Milford and Belper. The closest settlement that contains key properties and attributes that convey the OUV of the WHS is Darley Abbey with its mill workers housing, overseers housing and associated structures that lie adjacent to the River Derwent. The mills, associated buildings and ancillary structures lying on the opposite bank would be unaffected by the Scheme. There is no visual connection between the settlement and the Scheme. However, the Derwent Valley and the river meadows to the north of Darley Abbey are part of its setting and the relationship to the formerly rural landscape within which Darley Abbey Mills was established, albeit modified by changing uses such as playing fields, dog runs, recreation fishing and commercial turf production. There are pockets of land such as the area to be used for floodplain compensation within the Derwent Valley north of Darley Abbey and south of Little Eaton junction which retain the rural character of the floodplain.
- 7.2.5 The Derwent Valley Heritage Way has been identified as a walk to experience the contrast between the industrial elements of the Darley Abbey Mills and the rural aspects of the Derwent Valley. It directs walkers into the wider landscape beyond the mills complex. During construction of the Scheme the Derwent Valley Heritage Way would remain open with footpath diversions in place to allow for the access. The construction of the floodplain compensation area would appear intrusive and would change, albeit temporarily, a small part of rural character of the Derwent Valley. However, this would be restored and returned to agricultural use and would thus appear natural and rural once again. The existing A38 is already part of the landscape around Little Eaton, and whilst the Scheme would change aspects of it, particularly during construction, it would remain a feature of the existing landscape.
- 7.2.6 Overall, it is assessed that the Scheme would have a **Negligible** negative impact on this attribute of OUV, resulting in a **Slight adverse** effect.

**Value 3:**

*The dissemination of the new technology and new mode of mass production, from the Derwent Valley to other parts of the UK, Europe and North America, prior to the introduction of steam power and the transference of mill development to the coalfields of Lancashire.*

*This value is embodied in the physical attributes of a 'relict' industrial landscape, where late 18th and early 19th century industrial development may still be seen in an 18th/19th century agricultural landscape containing evidence of other early industrial activity such as hosiery, iron founding, nail making, quarrying, lead mining and smelting.*

- 7.2.7 During construction of the Scheme there would be changes to some aspects of the semi-rural landscape in and around the Scheme. There is a potential for some physical loss of fabric to some identified non-designated heritage asset that collectively combine to convey this value of the OUV. These assets in themselves are not of universal value, but contribute to the experience of the landscape as illustrating and conveying past medieval agricultural endeavours such as ridge and furrow. The impacts on each individual asset, all of which are non-designated, have been individually assessed within the ES Chapter 6: Cultural Heritage. It is acknowledged that the loss of some archaeological fabric would lead to some limited impacts to this value, but these are largely outside of the WHS boundary.
- 7.2.8 The construction of the floodplain compensation area would affect the experience of the agricultural landscape, but this would be a temporary impact and the land would return to being rural in character and appearance albeit slightly altered.
- 7.2.9 Overall, it is assessed that the Scheme would have a **Negligible** negative impact on this value and the attributes which convey OUV, resulting in **Slight adverse** effect.

**Value 4:**

*The further development of industry including the introduction of new modes of transportation and utilities.*

*This value is embodied in the physical attributes of Canals, canal wharfs, canal bridges, aqueducts, winding holes, weighbridges, tramways, pumping houses, turnpike roads, toll houses, toll gateposts, railways, railway stations, railway bridges, railway cuttings, railway junctions, railway workshops, gas works, metalled roads, paved causeways, street lighting, reservoirs, flood bunds.*

- 7.2.10 The construction of the Scheme would physically impact the remains of the Derby Canal. These remains lie outside the WHS boundary and buffer zone. The remains of the Derby Canal are not readily visible or legible within the landscape and as such make no visual contribution to the setting of the WHS. However, they are by association with this value, an attribute that helps articulate the OUV of the WHS. It also illustrates the Derwent Valley as a spine that hosted an array of historic and strategic communication routes to further facilitate the development of industry along the valley. A large part of the Derby Canal was removed during the construction of the A38 and the A61.
- 7.2.11 The Midland Mainline railway line would not be significantly affected by the Scheme (although the existing bridge would be widened) and other canals such as the Cromford Canal and those that are more prominent elsewhere within the valley would not be impacted. There would be no impacts on any of the other attributes that are considered to convey this value of OUV.



- 7.2.12 Overall, it is assessed that the Scheme would have a **Negligible** negative impact on this value and associated physical attributes of OUV, resulting in a **Slight adverse**.

#### **Impacts and effects of the Scheme on Integrity**

- 7.2.13 The Scheme would have limited impacts on the elements of rural landscape and the Derwent River by creating a more visible and prominent road within the setting of the WHS. However, the Scheme would be appropriately landscaped, with planting being incorporated into the design to sustain the current experience of Little Eaton junction and its relationship with the WHS in the lower part of the Derwent Valley. The lower part of the Derwent Valley has been more readily affected by erosion of the rural landscape than those areas in the upper valleys. The Scheme would maintain the interdependence between the mills, the settlements, the railway and the River Derwent which would remain clearly visible and legible within the Derwent Valley floodplain.
- 7.2.14 Outside the WHS there may be some loss of archaeological remains associated with the agricultural and industrial landscape of the WHS.
- 7.2.15 Overall, it is assessed that the Scheme would have a **Negligible** adverse impact on the integrity of the WHS, resulting in a **Slight adverse** effect.

#### **Impacts and effects of the Scheme on Authenticity**

In relation to Derwent Valley Mills WHS, the primary factors that express its Authenticity are considered to relate to:

- Form and design: despite alterations the form of some industrial buildings are still intact and easy to discern.
- Materials and substance: the materials used to construct industrial buildings and the structural techniques used.
- Location and setting: the relationship between the attributes and the rural landscape.

- 7.2.16 In terms of form and design, materials and substance, the Scheme would not affect any industrial mills or any associated buildings.
- 7.2.17 In terms of location and setting, the Scheme allows the overall landscape to continue to reflect well its technological, social and economic development and the way the modern factory system developed within this rural area on the basis of water power.
- 7.2.18 Overall, it is anticipated that the scheme would have a **Negligible** adverse impact of the Authenticity of the WHS, resulting in a **Slight adverse** effect.

### **7.3 Assessment of overall significance of effect of the Scheme**

- 7.3.1 The effect of the Scheme on the overall OUV of the Derwent Valley WHS, taking into account the mitigation measures embedded within the Scheme design and that the Scheme is concerned with a small section of the overall WHS, is assessed as Slight adverse (i.e. no more than a **Negligible** impact upon an asset of **Very High value**).

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## 8 CONCLUSIONS

### 8.1 World Heritage Convention and Operational Guidelines

- 8.1.1 The Convention Concerning the Protection of the World Cultural and Natural Heritage (the World Heritage Convention) is the principal global instrument for the protection of cultural and natural heritage. The UK ratified the Convention on 29 May 1984. Article 4 of the Convention sets out the duties of States Parties:
- 8.1.2 *'Each State Party to this Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in Articles 1 and 2 and situated on its territory, belongs primarily to that State. It will do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and co-operation, in particular, financial, artistic, scientific and technical, which it may be able to obtain.'* (UNESCO, 1972).
- 8.1.3 The Operational Guidelines note that *'each nominated property should have an appropriate management plan or other documented management system which must specify how the Outstanding Universal Value of a property should be preserved, preferably through participatory means.'* (UNESCO, 2017: para. 108). *'States Parties are responsible for implementing effective management activities for a World Heritage property. State Parties should do so in close collaboration with property managers, the agency with management authority and other partners, and stakeholders in property management.'* (ibid., para. 117).
- 8.1.4 In England, these commitments are fulfilled through the statutory planning system, designation of specific assets within World Heritage properties and the development of WHS Management Plans.
- 8.1.5 The 2014 WHS Management Plan (DCC, 2014) is in place to protect and manage the property as required by the World Heritage Convention. It sets out the long term vision, a mission statement and key aims and objectives which have developed from an analysis of current issues and opportunities. It contains management objectives and a prioritised Action Plan for the next five years.

### 8.2 Alignment with WHS Management Plan vision, aims and policies

- 8.2.1 The ICOMOS HIA Guidance notes that *'Conservation policies embedded in the management system may also be used as a measure to assess potential adverse impacts'* (ICOMOS, 2011: p2) and that *'Proposals should be tested against existing policy frameworks and the management plan for the property and surrounding area'* (ibid., 10).

*The vision of the WHS is that 'The Derwent Valley Mills will...*

*Celebrate the Outstanding Universal Value of the DVMWHS, enabling the global community to enjoy, engage with and be inspired by their legacy.*

*Be renowned for best practices in WHS management and for its contribution to the local and regional economy.*

*Be a popular, quality tourist destination, shaping a creative future and become a symbol of regional and national pride.*

8.2.2 The keys aims are:

- To protect, conserve and enhance the OUV of the Derwent Valley Mills WHS.
- To promote public awareness of and access to the Derwent Valley Mills WHS.
- To promote the development of sustainable tourism within the Derwent Valley Mills WHS.
- To enhance the economic and social wellbeing of the Derwent Valley Mills WHS and its communities.
- To promote public understanding of the Derwent Valley Mills WHS by facilitating research.
- To promote educational use of the Derwent Valley Mills WHS for formal and informal learning.
- To build strong partnerships with volunteers and local, regional and national stakeholders.
- To work with partners to access funding and deliver projects.
- To manage the Partnership in an efficient and sustainable manner.

8.2.3 The A38 is not specifically mentioned as an issue within the WHS Management Plan. The WHS Management Plan states that transportation within the WHS '*must be managed in an effective and sustainable manner so that this historic fabric, landscape and communities will be protected from environmental damage whilst safeguarding the needs of the residents and other users of the transport system, including visitors*' (WHS Management Plan, para 11.1.1, p. 45).

8.2.4 The WHS Management Plan acknowledges that '*many of the transport links within the property have a clear link to its OUV. The canal, railway and the A6 have played a key role in its development*' (WHS Management Plan. Para.11.2.1, p46). Similarly the Scheme would ensure that transportation links continue to have a role within the development of Derby.

8.2.5 With regards to vehicular traffic, the WHS Management Plan is clear that the A6 is the major highway route into and out of the WHS. It runs the length of the Derwent Valley providing access to Matlock Bath and the Peak District National Park. It states that given the topography of the valley, which also accommodates the river, canal and railway, measures to significantly increase capacity on the A6 are not practical and would result in an impact on the OUV and the environment. It is, therefore, likely inevitable that it would continue to suffer from seasonal congestion. The current condition of congestion on the A38 is not mentioned within the WHS Management Plan.

8.2.6 The historic landscape of the river valley is a major factor in determining the special character and sense of place of the WHS. Detailed descriptions of the physical, natural and cultural elements have been explored above to help define the contribution that the assessment area makes to the character of the overall WHS.

8.2.7 The design of the Scheme has been developed with regard to and accords with the relevant aims and policies set out in the 2014 WHS Management Plan.

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### **8.3 Alignment with local planning policy**

- 8.3.1 In line with CP20 – Heritage – Historic Environment (Derby City Local Plans Part 1 Core Strategy), the Scheme proposes to conserve the OUV of the Derwent Valley Mills WHS. The Scheme is also in accordance with AC7 – the River Derwent Corridor and AC8 – Our City Our River, as it proposes to conserve the rich cultural heritage of the Derwent Valley, including protecting the OUV of the WHS and making provision within the Scheme to managing flood risks through the provision of a floodplain compensation area that compensates for the floodplain losses due to the Scheme. Measures to manage highway runoff would also be provided, whilst Dam Brook diversion also takes account of area flooding. The Scheme thus provides appropriate mitigation measures to manage flooding impacts.
- 8.3.2 In line with AC9 – Derwent Valley Mills WHS – the Scheme proposes to sustain and protect the OUV of the WHS. Similarly, the Scheme would not affect Darley Abbey and is thus in accordance with AC10.
- 8.3.3 The Scheme is also in accordance with City of Derby Local Plan Review Policies E18, E19, E21 and E22. The Scheme would conserve conservation areas, listed buildings and nationally important archaeology.
- 8.3.4 In line with EBC's Core Strategy Policy E11 and saved policies EV5, EV6, EV7, EV8 and EV9, the Scheme sustains the significance of heritage assets.

### **8.4 Alignment with national planning policies (NNNPS & NPPF)**

- 8.4.1 The policies contained within the National Planning Statement for National Networks (NPSNN) accords with the policies presented within the National Planning Policy Framework (NPPF). World Heritage Sites are assets of the highest significance (NPPF para.194, b). Both documents advise local planning authorities to look for opportunities for new development within World Heritage Sites and within the setting of heritage assets to enhance or better reveal their significance (para. 5.137/ 200). This Scheme does not enhance or better reveal significance, but it does conserve it. Both state that not all elements of a WHS would necessarily contribute to its significance and that the relative significance of the element affected and its contribution to the WHS as a whole needs to be assessed (para 5.135/201). In this respect, Little Eaton junction is located within a semi-rural area and its contribution to the whole WHS is very limited and, given the scale of the Derwent Valley Mills WHS, contributes little to its overall significance. The Scheme has been assessed as having a slight adverse effect on the OUV of the WHS (i.e. a negligible impact upon an asset of very high value). In national policy terms, this would be categorised as being of less than substantial harm to the WHS.

### **8.5 Effects on the Outstanding Universal Value of the WHS**

- 8.5.1 Overall the Scheme has been assessed to have a slight adverse effect on the OUV of the WHS as a whole (i.e. a negligible impact upon an asset of very high value). It has also been assessed as leading to less than substantial harm to the significance of the WHS under the NPPF.
- 8.5.2 The Scheme has sought to avoid or minimise adverse impacts on Values and Attributes of OUV, Integrity and authenticity wherever feasible. The Scheme would not

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have any moderate, large or large adverse effects on the OUV of the Derwent Valley Mills WHS.

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## 10 GLOSSARY OF TERMS USED

Term	Meaning
Aesthetic Value	Value deriving from the ways in which people draw sensory and intellectual stimulation from a place. (p. 72, Conservation Principles, English Heritage, 2008)
Archaeological interest	There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them. (Annex 2: Glossary, National Planning Policy Framework, Ministry of Housing, Communities and Local Government, 2012)
Attribute / Attributes of Outstanding Universal Value	<p>Attributes are a direct tangible expression of the Outstanding Universal Value of the property. Attributes are aspects of a property which are associated with or express the Outstanding Universal Value. Attributes convey that value and allow an understanding of it. Attributes can be tangible or intangible.</p> <p>The WHS Operational Guidelines indicate a range of types of attribute which might convey Outstanding Universal Value, including:</p> <ul style="list-style-type: none"> <li>• Form and design.</li> <li>• Materials and substance.</li> <li>• Use and function.</li> <li>• Traditions, techniques and management systems.</li> <li>• Location and setting.</li> <li>• Language, and other forms of intangible heritage.</li> <li>• Spirit and feeling (Operational Guidelines, Paragraph 82).</li> </ul> <p>It is essential that the attributes identified for a property should flow from the Statement of Outstanding Universal Value and the justification for the criteria. Attributes must be identified as they are vital to understanding authenticity and integrity, and are the focus of protection, conservation and management.</p> <p>(UNESCO, ICCROM, ICOMOS and IUCN 2011 Preparing World Heritage Nominations. World Heritage Resource Manual. 2nd ed., 31-32)</p>
Associations	<i>"...means the special connections that exist between people and a place."</i> (The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 2013)
Authenticity	<p>The ability to understand the value attributed to the heritage depends on the degree to which information sources about this value may be understood as credible or truthful. Knowledge and understanding of these sources of information, in relation to original and subsequent characteristics of the cultural heritage, and their meaning, are the requisite bases for assessing all aspects of authenticity.</p> <p>(Paragraph 80, Operational Guidelines for Implementation of the World Heritage Convention, UNESCO, 2017)</p> <p>Depending on the type of cultural heritage, and its cultural context, properties may be understood to meet the conditions of authenticity if their cultural values (as recognised in the nomination criteria proposed) are truthfully and credibly expressed through a variety of attributes including:</p> <ul style="list-style-type: none"> <li>• Form and design.</li> <li>• Materials and substance.</li> <li>• Use and function.</li> <li>• Traditions, techniques and management systems.</li> <li>• Location and setting.</li> <li>• Language, and other forms of intangible heritage.</li> <li>• Spirit and feeling.</li> </ul>

Term	Meaning
	<ul style="list-style-type: none"> <li>Other internal and external factors.</li> </ul> <p>(Paragraph 80, Operational Guidelines for Implementation of the World Heritage Convention, UNESCO, 2017)</p> <p>Authenticity is about the link between attributes and potential Outstanding Universal Value. That link needs to be truthfully expressed so that the attributes can fully convey the value of the property. Authenticity is therefore a measure of how well attributes convey potential Outstanding Universal Value. In the case of archaeological sites, authenticity is judged according to the ability of the archaeological remains to truthfully convey their meaning. In many cases, conjectural reconstruction might hinder this process and compromise authenticity. Similarly, while reconstruction of incomplete buildings and structures can be justified in some circumstances, this can also impact on their ability to truthfully convey meaning.</p> <p>(UNESCO, ICCROM, ICOMOS and IUCN 2011 Preparing World Heritage Nominations. World Heritage Resource Manual. 2nd ed., 61)</p>
Conservation	<p>All operations designed to understand a property, know its history and meaning, ensure its material safeguard, and, if required, its restoration and enhancement.</p> <p>(Definitions, Nara Document on Authenticity, ICOMOS, 1994)</p> <p>The process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance.</p> <p>(Annex 2: Glossary, National Planning Policy Framework, Ministry of Housing, Communities and Local Government, 2012)</p> <p>The process of managing change to a significant place in its setting in ways that will best sustain its heritage values, while recognising opportunities to reveal or reinforce those values for present and future generations.</p> <p>(p. 71, Conservation Principles, English Heritage, 2008)</p>
Context	<p>Any relationship between a place and other places, relevant to the values of that place.</p> <p>(Conservation Principles, English Heritage (now Historic England), 2008)</p>
Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention)	<p>The Convention Concerning the Protection of the World Cultural and Natural Heritage was adopted by the General Conference of UNESCO at its seventeenth session in Paris on 16 November 1972 (UNESCO 1972).</p> <p>The Convention provides for the identification, protection, presentation and transmission to future generations of cultural and natural heritage around the world considered to be of Outstanding Universal Value.</p>
Criteria for the assessment of Outstanding Universal Value	<p>The [World Heritage] Committee considers a property as having Outstanding Universal Value [...] if the property meets one or more of the following criteria. Nominated properties shall therefore:</p> <ul style="list-style-type: none"> <li>Represent a masterpiece of human creative genius.</li> <li>Exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design.</li> <li>Bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.</li> <li>Be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.</li> <li>Be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.</li> <li>Be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria).</li> <li>Contain superlative natural phenomena or areas of exceptional natural beauty and</li> </ul>

Term	Meaning
	<p>aesthetic importance.</p> <ul style="list-style-type: none"> <li>• Be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features.</li> <li>• Be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals.</li> <li>• Contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of Outstanding Universal Value from the point of view of science or conservation.</li> </ul> <p>(Paragraph 77, Operational Guidelines for Implementation of the World Heritage Convention, UNESCO, 2017)</p> <p>To be deemed of Outstanding Universal Value, a property must also meet the conditions of integrity and / or authenticity and must have an adequate protection and management system to ensure its safeguarding.</p> <p>(Paragraph 78, Operational Guidelines for Implementation of the World Heritage Convention, UNESCO, 2017)</p>
Cultural heritage	<p>Cultural heritage is defined in Article 1 of the World Heritage Convention: For the purpose of this Convention, the following shall be considered as "cultural heritage":</p> <p>Monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;</p> <p>Groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;</p> <p>Sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.</p> <p>(Convention Concerning the Protection of the World Cultural and Natural Heritage, UNESCO, 1972)</p> <p>Inherited assets which people identify and value as a reflection and expression of their evolving knowledge, beliefs and traditions, and of their understanding of the beliefs and traditions of others.</p> <p>(p. 71, Conservation Principles, English Heritage, 2008)</p>
Department for Digital, Culture, Media and Sport (DCMS)	<p>The Department for Digital, Culture, Media and Sport acts as the State Party for the whole of the United Kingdom and is responsible for the United Kingdom's general compliance with the World Heritage Convention.</p> <p>The department has responsibility for listing and scheduling sites and for making scheduled monument consent decisions.</p>
Department for Transport (DfT)	<p>Government department responsible for the transport network in England, and for aspects of the transport network in the devolved administrations.</p>
Design Manual for Roads and Bridges (DMRB)	<p>The Design Manual for Roads and Bridges (DMRB) contains information about current standards, advice notes and other published documents relating to the design, assessment and operation of trunk roads, including motorways. The DMRB was introduced in 1992 in England and Wales, and following that in Scotland and Northern Ireland.</p>
Designated heritage asset	<p>A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation.</p> <p>(Annex 2: Glossary, National Planning Policy Framework, Ministry of Housing, Communities and Local Government, 2012)</p>
Designation	<p>The recognition of particular heritage value(s) of a significant place by giving it formal status under law or policy intended to sustain those values.</p>

Term	Meaning
	(p. 71, Conservation Principles, English Heritage, 2008)
Development Consent Order (DCO)	The means of applying for consent to undertake a Nationally Significant Infrastructure Project (NSIP). NSIPs include, for example, major energy and transport projects.
Evidential Value	Value deriving from the potential of a place to yield evidence about past human activity. (p71, Conservation Principles, English Heritage, 2008)
Geographic(al) Information Systems (GIS)	Any system that captures, stores, analyses, manages, and presents all types of spatial and geographical data location. GIS merges cartography and database technology.
Heritage	Heritage is a broad concept and includes the natural as well as the cultural environment. It encompasses landscapes, historic places, sites and built environments, as well as bio-diversity, collections, past and continuing cultural practices, knowledge and living experiences. It records and expresses the long processes of historic development, forming the essence of diverse national, regional, indigenous and local identities and is an integral part of modern life. It is a social dynamic reference point and positive instrument for growth and change. The particular heritage and collective memory of each locality or community is irreplaceable and an important foundation for development, both now and into the future. (International Cultural Tourism Charter, ICOMOS, 2002)
Heritage asset	A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing). (Annex 2: Glossary, National Planning Policy Framework, Ministry of Housing, Communities and Local Government, 2012)
Historic England	The Historic Buildings and Monuments Commission for England, more commonly known as Historic England, established in 1984 by the National Heritage Act 1983. (Historic England is the Government's adviser on the historic environment in England)
Historic interest	To be of special historic interest a building must illustrate important aspects of the nation's social, economic, cultural, or military history and / or have close historical associations with nationally important people. There should normally be some quality of interest in the physical fabric of the building itself to justify the statutory protection afforded by listing. (p. 4, Principles of Selection for Listed Buildings, 2010, DCMS)
ICOMOS (International Council of Monuments and Sites)	The International Council on Monuments and Sites (ICOMOS), a non-governmental organisation dedicated to the conservation of the world's monuments and sites. Its work is based on the principles in the 1964 International Charter on the Conservation and Restoration of Monuments and Sites (The Venice Charter) with ICOMOS created in 1964.  In order to promote the doctrine and the techniques of conservation. ICOMOS is the advisory body of the World Heritage Committee which reviews nominations of properties with cultural values proposed for inscription on the World Heritage List, as well as with comparative studies, technical assistance and reports on the state of conservation of inscribed properties.
Integrity	Integrity is a measure of the wholeness and intactness of the natural and / or cultural heritage and its attributes. Examining the conditions of integrity, therefore requires assessing the extent to which the property: a) Includes all elements necessary to express its outstanding universal value. b) Is of adequate size to ensure the complete representation of the features and processes which convey the property's significance. c) Suffers from adverse effects of development and/ or neglect. (Paragraph 88, Operational Guidelines for Implementation of the World Heritage Convention, UNESCO, 2017) For properties nominated under criteria (i) to (vi), the physical fabric of the property and /

Term	Meaning
	<p>or its significant features should be in good condition, and the impact of deterioration processes controlled. A significant proportion of the elements necessary to convey the totality of the value conveyed by the property should be included. Relationships and dynamic functions present in cultural landscapes, historic towns or other living properties essential to their distinctive character should also be maintained.</p> <p>(Paragraph 89, Operational Guidelines for Implementation of the World Heritage Convention, UNESCO, 2017)</p> <p>Integrity is a measure of the completeness or intactness of the attributes that convey Outstanding Universal Value. The key words are 'wholeness', 'intactness' and 'absence of threats'. These can be understood as follows:</p> <p>Wholeness: all the necessary attributes are within the property.</p> <p>Intactness: all the necessary attributes are still present – none are lost or have been significantly damaged or have decayed.</p> <p>Absence of threats: none of the attributes are threatened by development, deterioration or neglect.</p> <p>In the case of natural and cultural properties, human use is both permissible and compatible with World Heritage listing, provided it is sustainable, and compatible with the values of the property. It is important to critically evaluate the condition of the property within the nomination document, and to explain honestly and openly any areas where there are human or other impacts on the condition of the property. Integrity and authenticity are different aspects of the Outstanding Universal Value of a property.</p> <p>(UNESCO, ICCROM, ICOMOS and IUCN 2011 Preparing World Heritage Nominations. World Heritage Resource Manual. 2nd ed., pp. 65-67)</p>
Interpretation	<p>The full range of potential activities intended to heighten public awareness and enhance understanding of cultural heritage site. These can include print and electronic publications, public lectures, on-site and directly related off-site installations, educational programmes, community activities, and ongoing research, training, and evaluation of the interpretation process itself.</p> <p>(ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites, 2008)</p>
Nationally Significant Infrastructure Project	<p>A project of a type and scale defined under the Planning Act 2008 and by order of the Secretary of State relating to energy, transport, water, waste water and waste generally. These projects require a single development consent. Planning permission, listed building consent and scheduled monument consent amongst others are not required for Nationally Significant Infrastructure Projects.</p> <p>(Planning Act 2008 c.29)</p>
Operational Guidelines for the Implementation of the World Heritage Convention	<p>The Operational Guidelines for the Implementation of the World Heritage Convention are prepared by the World Heritage Committee for the purpose of informing States Parties to the Convention of the principles which guide the work of the World Heritage Committee in establishing the World Heritage List, the List of World Heritage in Danger and in granting international assistance under the World Heritage Fund.</p>
Outstanding Universal Value	<p>Outstanding Universal Value means cultural and / or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole.</p> <p>(Paragraph 49, Operational Guidelines for Implementation of the World Heritage Convention, UNESCO, 2017)</p> <p>Nominations presented to the Committee shall demonstrate the full commitment of the State Party to preserve the heritage concerned, within its means. Such commitment shall take the form of appropriate policy, legal, scientific, technical, administrative and financial measures adopted and proposed to protect the property and its Outstanding Universal Value.</p> <p>(Paragraph 53, Operational Guidelines for Implementation of the World Heritage Convention, UNESCO, 2017)</p>
Project Control Framework	<p>A joint Department for Transport and Highways England approach to managing major projects. The Framework comprises a standard project lifecycle; standard project</p>

Term	Meaning
	deliverables; project control processes and governance arrangements.
Scheduled monument	<p>[...] 'Ancient monument' means any scheduled monument and any other monument which in the opinion of the Secretary of State is of public interest by reason of the historic, architectural, traditional, artistic or archaeological interest attaching to it. (s61(12) Ancient Monuments and Archaeological Areas Act 1979)</p> <p>[...] 'Scheduled monument' means any monument which is for the time being included in the schedule [compiled and maintained by the Secretary of State for Culture, Media and Sport]. (s1(11) Ancient Monuments and Archaeological Areas Act 1979)</p>
Setting of a heritage asset	<p>The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral. (Annex 2: Glossary, National Planning Policy Framework, Ministry of Housing, Communities and Local Government, 2012)</p> <p>The surroundings in which a place is experienced, its local context, embracing present and past relationships to the adjacent landscape. (p. 72, Conservation Principles, English Heritage, 2008)</p> <p>The setting of a heritage structure, site or area is defined as the immediate and extended environment that is part of, or contributes to, its significance and distinctive character. Beyond the physical and visual aspects, the setting includes interaction with the natural environment; past or present social or spiritual practices, customs, traditional knowledge, use or activities and other forms of intangible cultural heritage aspects that created and form the space as well as the current and dynamic cultural, social and economic context. (Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas, ICOMOS, 2005)</p>
Significance (for heritage policy)	<p>The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting. (Annex 2: Glossary, National Planning Policy Framework, Ministry of Housing, Communities and Local Government, 2012)</p>
Statement of Outstanding Universal Value	<p>A Statement of Outstanding Universal Value is the official statement adopted by the World Heritage Committee at the time of inscription of a property on the World Heritage List. When the World Heritage Committee agrees to inscribe a property on the World Heritage List, it also agrees on a Statement of Outstanding Universal Value that encapsulates why the property is considered to be of Outstanding Universal Value, how it satisfies the relevant criteria, the conditions of integrity and (for cultural properties) authenticity, and how it meets the requirements for protection and management in order to sustain Outstanding Universal Value in the long-term [...] They should help to raise awareness regarding the value of the property, guide the assessment of its state of conservation and inform protection and management. (Annex 5, Section 3.3, Operational Guidelines for Implementation of the World Heritage Convention, UNESCO, 2017)</p>
United Nations Educational, Scientific and Cultural Organisation (UNESCO)	<p>UNESCO works to create the conditions for dialogue among civilizations, cultures and peoples, based upon respect for commonly shared values. It is through this dialogue that the world can achieve global visions of sustainable development encompassing observance of human rights, mutual respect and the alleviation of poverty, all of which are at the heart of UNESCO'S mission and activities.</p> <p>The Constitution of UNESCO (the United Nations Educational, Scientific and Cultural Organization) was signed in London on 16 November 1945 and came into force with the 20th ratification on 4 November 1946. The purposes of UNESCO as stated in the Constitution are: '[...] to contribute to peace and security by promoting collaboration among nations through education, science and culture in order to further universal respect for justice, for the rule of law and for the human rights and fundamental freedoms which are affirmed for the peoples of the world, without distinction of race, sex, language</p>

Term	Meaning
	or religion, by the Charter of the United Nations'.
UNESCO World Heritage Centre, Secretariat	Article 14 of the World Heritage Convention notes that the World Heritage Committee 'shall be assisted by a Secretariat appointed by the Director-General' of UNESCO. Since 1992 the UNESCO World Heritage Centre, located at UNESCO Headquarters in Paris, has functioned as this Secretariat to the World Heritage Committee and its Bureau. The Secretariat is responsible for the daily administrative and technical management of the Convention. The World Heritage Centre prepares the documentation for the Committee and its Bureau and has the responsibility for the implementation of their decisions.
Value; heritage value(s)	An aspect of the worth or importance attached by people to qualities of places, categorised as aesthetic, evidential, communal or historical value. (Conservation Principles, English Heritage, 2008)
World Heritage Committee	The intergovernmental World Heritage Committee meets once a year, and consists of representatives from 21 of the States Parties to the Convention elected by their General Assembly in accordance with Article 8 (1) of the World Heritage Convention (UNESCO 1972).
World Heritage Convention	See Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention)
World Heritage List	Article 11 (2) of the 1972 UNESCO World Heritage Convention refers to the World Heritage List as: [...] a list of properties forming part of the cultural heritage and natural heritage, as defined in Articles 1 and 2 of this, as defined in Articles 1 and 2 of this Convention, which it considers as having outstanding universal value in terms of such criteria as it shall have established. An updated list shall be distributed at least every two years.
World Heritage Site	A site on a list of properties maintained by the World Heritage Committee of UNESCO and called the World Heritage List 'forming part of the cultural heritage and natural heritage...which it considers as having outstanding universal value in terms of such criteria as it shall have established'. (UNESCO World Heritage Convention 1972) Governments of countries that have ratified the Convention (States Parties) identify and nominate suitable sites to the World Heritage Committee for inscription on the list, which is maintained by UNESCO.



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## FIGURES

### **HIA Figures 2, 3, 4, 5 (other figures are integrated within the text)**

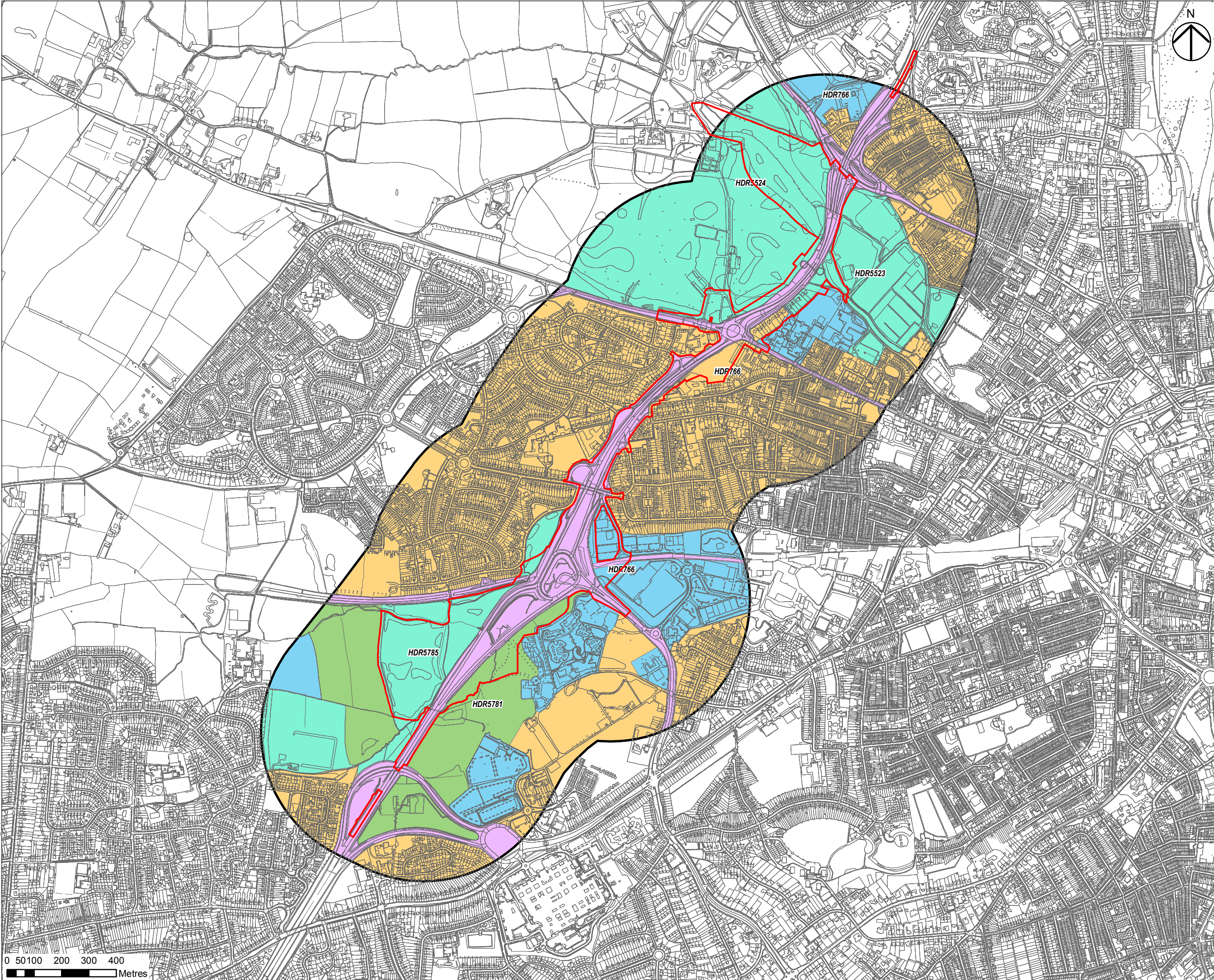
Figure 2: Kingsway and Markeaton - Historic Landscape Character Areas

Figure 3: Little Eaton Junction - Historic Landscape Character Areas

Figure 4: Little Eaton Junction - Location of Designated Heritage Assets (1)

Figure 5: Little Eaton Junction - Location of Designated Heritage Assets (2)





NOTES

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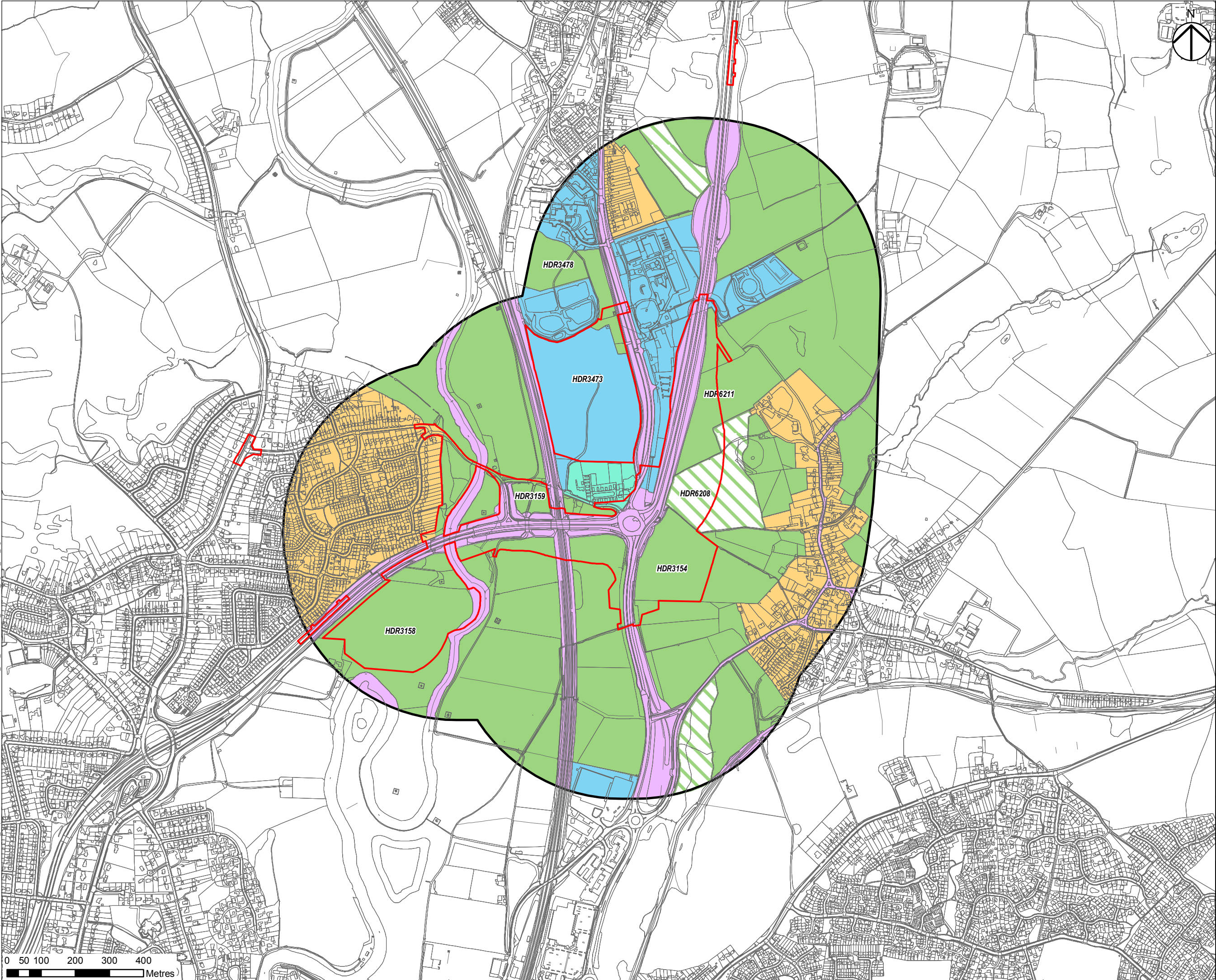
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LEGEND

- SCHEME BOUNDARY
- HISTORIC LANDSCAPE CHARACTER STUDY AREA
- HISTORIC LANDSCAPE CHARACTER AREAS
  - HISTORIC & 20TH CENTURY STRATEGIC COMMUNICATIONS ROUTES
  - MODERN INDUSTRIAL, CIVIC & COMMERCIAL
  - POST-MEDIEVAL & MODERN ORNAMENTAL PARKLAND & RECREATIONAL
  - POST-MEDIEVAL & MODERN SETTLEMENT
  - POST-MEDIEVAL & MODERN FIELDS & ENCLOSED LAND

FIRST ISSUE	GB	SW	13/02/19	P01
Revision Details	By	Check	Date	Suffix
Purpose of Issue	FINAL			
Client	Highways England Floor 5 Two Colmore Square 38 Colmore Circus Birmingham B4 6BN			
Development Consent Order Number	TR010022			
Project Title	A38 DERBY JUNCTIONS			
Drawing Title	FIGURE 2 KINGSWAY AND MARKEATON HISTORIC LANDSCAPE CHARACTER AREAS			
Designed AC	Drawn GB	Checked AC	Approved SW	Date 13/02/19
Internal Project No 60533462			Suitability S2	
Scale @ A3 1:12,500			Zone A38	
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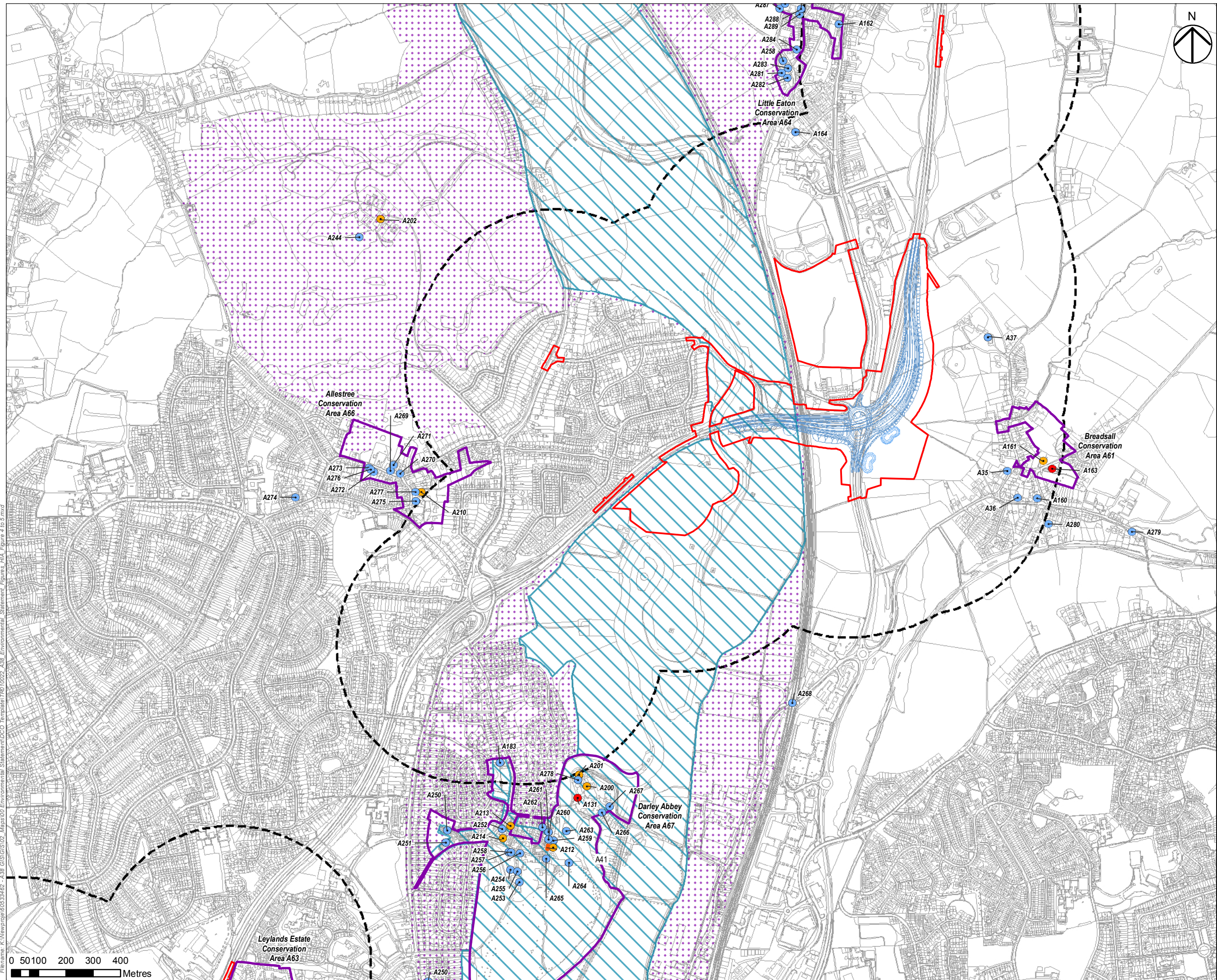
- SCHEME BOUNDARY
- HISTORIC LANDSCAPE CHARACTER STUDY AREA
- HISTORIC LANDSCAPE CHARACTER AREAS
  - HISTORIC & 20TH CENTURY STRATEGIC COMMUNICATIONS ROUTES
  - POST-MEDIEVAL & MODERN INDUSTRIAL, CIVIC & COMMERCIAL
  - MODERN ORNAMENTAL PARKLAND & RECREATIONAL
  - MEDIEVAL, POST-MEDIEVAL & MODERN SETTLEMENT
  - MEDIEVAL, POST-MEDIEVAL & MODERN FIELDS & ENCLOSED LAND
  - HISTORIC WOODLAND

FIRST ISSUE	GB	SW	13/02/19	P01
Revision Details	By	Check	Date	Suffix
Purpose of Issue	FINAL			
Client	<div>Highways England Floor 5 38 Colmore Circus Birmingham B4 6BN</div> <div></div>			
Development Consent Order Number	TR010022			
Project Title	A38 DERBY JUNCTIONS			
Drawing Title	FIGURE 3 LITTLE EATON JUNCTION HISTORIC LANDSCAPE CHARACTER AREAS			
Designed AC	Drawn GB	Checked AC	Approved SW	Date 13/02/19
Internal Project No 60533462			Suitability S2	
Scale @ A3 1:10,000			Zone A38	
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Filename: K:\Newp016\60533462 - A38 GIS\GIS02\_Maps\00 Environmental Statement\DOO Template\TR010022\_A38 Environmental Statement\_Figures\_HIA\_Figure 2 to 3.mxd



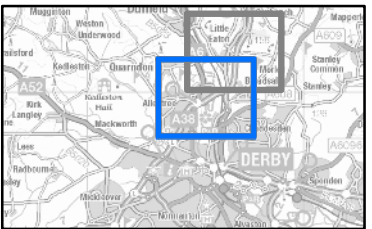



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### LEGEND

- 
- Legend:
- The Scheme
  - Scheme Boundary
  - Study Area (Minimum 500m)
  - Grade I Listed Building
  - Grade II\* Listed Building
  - Grade II Listed Building
  - Scheduled Monument - Remains of Darley Abbey (A212)
  - Conservation Area
  - World Heritage Site
  - Derwent Valley Mills WHS Core Area (A41)
  - Derwent Valley Mills WHS Buffer Zone



FIRST ISSUE		<div>GB</div> <div>SW</div>		13/02/19	P01
Revision Details					
		<div>By</div> <div>Check</div>		Date	Signature
Purpose of Issue					
<div>FINAL</div>					
<div>Client</div> <div>Highways England</div> <div>Floor 5</div> <div>Two Colmore Square</div> <div>38 Colmore Circus</div> <div>Birmingham</div> <div>B4 6BN</div> <div>  <div>highways england</div> </div>					
Development Consent Order Number					
TR010022					
Project Title					
<div>A38</div> <div>DERBY JUNCTIONS</div>					
Drawing Title					
<div>FIGURE 4</div> <div>LITTLE EATON JUNCTION</div> <div>LOCATION OF DESIGNATED</div> <div>HERITAGE ASSETS</div>					
Designed AC	Drawn GB	Checked AC	Approved SW	Date 13/02/19	
Original Project No 60533462		Suitability S2			
Scale @ A3		Zone			
1:12,500		A38			
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Highways England Pin					
HE514503		-ACM	-EGN-		
A38_SW_PR_ZZ		-DR-	LE_0039		
Location		Type	Role	Number	
				P01	





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LEGEND

- The Scheme
- Scheme Boundary
- Study Area (Minimum 500m)
- Grade I Listed Building
- Grade II\* Listed Building
- Grade II Listed Building
- Conservation Area
- World Heritage Site
- Derwent Valley Mills WHS Core Area (A41)
- Derwent Valley Mills WHS Buffer Zone

FIRST ISSUE	GB	SW	13/02/19	P01
Revision Details	By	Check	Date	Suffix
Purpose of Issue	FINAL			
Client				
Development Consent Order Number	TR010022			
Project Title	A38 DERBY JUNCTIONS			
Drawing Title	FIGURE 5 LITTLE EATON JUNCTION LOCATION OF DESIGNATED HERITAGE ASSETS			
Designed AC	Drawn GB	Checked AC	Approved SW	Date 13/02/19
Internal Project No 60533462		Suitability S2		
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## APPENDIX 1: VISUALISATIONS





BASELINE



PROPOSED



Camera: Canon EOS 5D Mk3  
Lens: 50 mm (Canon EF 50 mm f/1.8)  
Horizontal Field of View: 153°  
Paper Size: A3

Easting / Northing: 435814.3, 339143.5  
Elevation: 51.09m  
Date / Time: 17/01/2019 10:12

**Note:**  
Images to be viewed at a comfortable arm's length.

A38 DERBY JUNCTIONS  
LITTLE EATON PROPOSED FLOODPLAIN COMPENSATION AREA  
Viewpoint 1





BASELINE



PROPOSED



Camera: Canon EOS 5D Mk3  
Lens: 50 mm (Canon EF 50 mm f/1.8)  
Horizontal Field of View: 215°  
Paper Size: A3

Easting / Northing: 435981.0, 339701.4  
Elevation: 51.70m  
Date / Time: 17/01/2019 10:26

**Note:**  
Images to be viewed at a comfortable arm's length.

A38 DERBY JUNCTIONS  
LITTLE EATON PROPOSED FLOODPLAIN COMPENSATION AREA  
Viewpoint 2