

A38 Derby Junctions

TR010022

Volume 6

6.1 Environmental Statement

Chapter 6 – Cultural Heritage

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**

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**6.1 Environmental Statement
Chapter 6 Cultural Heritage**

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6. Cultural Heritage

6.1. Introduction and competent expert evidence

- 6.1.1. This chapter assesses the potential cultural heritage impacts associated with the construction and operation of the Scheme, following the methodology set out in Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 2 (HA 208/07) (Highways Agency, 2007a). This chapter summarises the regulatory and policy framework related to cultural heritage, details the methodology followed for the assessment and describes the existing environment in the area surrounding the Scheme. Following this, the design and mitigation measures proposed to manage and minimise potential impacts are specified, after which residual cultural heritage effects of the Scheme are presented. Assumptions and limitations made during the assessment are provided in Section 6.5.
- 6.1.2. A key focus of this cultural heritage impact assessment concerns the Scheme impacts upon the Derwent Valley Mills World Heritage Site (WHS) which is located to the west of the existing Little Eaton junction, with some parts of the Scheme being located within the WHS boundary. Thus, in addition to presenting the findings of the Environmental Impact Assessment (EIA) in respect of cultural heritage, this chapter also incorporates a Heritage Impact Assessment (HIA) which specifically addresses the impacts of the Scheme upon the Outstanding Universal Value (OUV) of the Derwent Valley Mills WHS (refer to Appendix 6.1 [TR010022/APP/6.3]).
- 6.1.3. This chapter is also supported by a gazetteer of cultural heritage assets provided in Appendix 6.2 [TR010022/APP/6.3], whilst Appendix 6.3 [TR010022/APP/6.3] provides a range of maps, plans, photos of relevance to the assessment.
- 6.1.4. All figures cited within this chapter are included within Environmental Statement (ES) Volume 2 [TR010022/APP/6.2].
- 6.1.5. This chapter of the ES has been prepared by competent experts with relevant and appropriate experience. The technical lead for the cultural heritage assessment has 25 years of relevant experience and has professional qualifications as summarised in Appendix 1.1 [TR010022/APP/6.3].

6.2. Legislative and policy framework

- 6.2.1. As discussed in Chapter 1: Introduction, the primary basis for deciding whether or not to grant a Development Consent Order (DCO) is the National Policy Statement for National Networks (NPSNN) (Department for Transport (DfT), 2014). NPSNN Sections 4 and 5 set out policies to guide how DCO applications will be decided and how the impacts of national networks infrastructure should be considered. Table 6.1 identifies the NPSNN policies relevant to the cultural heritage assessment and where in this ES chapter information is provided to address these policy requirements.

Table 6.1: Relevant NPSNN policies for the cultural heritage assessment

Relevant NPSNN para. Ref.	Requirement of the NPSNN	Location where information addresses policy requirements
5.124	Non-designated assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments should be considered subject to the policies for designated heritage assets.	Non-designated assets are considered in this assessment. See para. 6.3.12, Table 6.2 and Sections 6.9 and 6.15.
5.125	The Secretary of State should also consider the impacts on other non-designated heritage assets.	Non-designated assets are considered in this assessment. See para. 6.3.12, Table 6.2 and Sections 6.9 and 6.15.
5.126 and 5.127	An assessment of any likely significant heritage impacts of the proposed project as part of the EIA. The applicant should include an appropriate desk-based assessment and, where necessary, undertake a field evaluation.	Appropriate field evaluations and desk-based assessment have been undertaken – refer to Sections 6.7 to 6.11.
5.131	When considering the impact of a proposed development on the significance of a designated heritage asset, the Secretary of State should give great weight to the asset's conservation. The more important the asset, the greater the weight should be.	The impact of the Scheme on the significance of heritage assets is considered in Section 6.15 and Appendix 6.2 [TR010022/APP/6.3].
5.133	Where the proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, the Secretary of State should refuse consent unless it can be demonstrated that the substantial harm or loss of significance is necessary in order to deliver substantial public benefits which outweigh that loss or harm.	The assessment does not identify any instance of 'substantial harm' or total loss of significance to any designated asset. See Section 6.15.
5.134	Where the proposed development will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.	The assessment does not identify any instances of 'substantial harm' or total loss of significance to any designated asset. See Section 6.15.

Relevant NPSNN para. Ref.	Requirement of the NPSNN	Location where information addresses policy requirements
5.135	Not all elements of a WHS or Conservation Area will necessarily contribute to its significance. The Secretary of State should treat the loss of a building (or other element) that makes a positive contribution to the site's significance either as substantial harm or less than substantial harm, as appropriate, taking into account the relative significance of the elements affected and their contribution to the significance of the Conservation Area or WHS as a whole.	The assessment takes into account the relative significance of heritage assets and their contribution to the significance of the Derwent Valley Mills WHS as a whole. The assessment does not identify any instance of 'substantial harm' or total loss of significance to any designated asset. See Section 6.15 and Appendix 6.1 [TR010022/APP/6.3].
5.137	Applicants should look for opportunities for new development within Conservation Areas and WHS, and within the setting of heritage assets, to enhance or better reveal their significance.	The significance of the Derwent Valley Mills WHS would not be adversely affected by the Scheme. See Section 6.15 and Appendix 6.1 [TR010022/APP/6.3].
5.140	Requirement to record and advance understanding of a heritage asset's significance prior to it being lost if this loss is justified.	Section 6.14 sets out the requirement for archaeological fieldwork and recording.
5.142	Consider requirements to ensure that appropriate procedures are in place for the identification and treatment of yet undiscovered heritage assets with archaeological interest discovered during construction.	Archaeological fieldwork and recording would be undertaken during the Scheme preliminary works stage. See Section 6.14.
5.144 to 5.146	The applicant should undertake an assessment of any likely significant landscape and visual impacts in the EIA. The applicant's assessment should include significant effects during construction of the project and/or its operation on landscape components and landscape character (including historic landscape characterisation).	The assessment has regard to historic landscape character and the impact of the Scheme upon it. See Section 6.11 – also refer to Chapter 7: Landscape and Visual.

6.2.2. The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government (MHCLG), 2019) is of relevance to this cultural heritage assessment, with particular reference to Section 16 Conserving and Enhancing the Historic Environment. In accordance with the NPPF, the NPSNN policies relating to the applicant's assessment are the primary source of policy guidance regarding this assessment.

6.2.3. Other relevant policies have been considered as part of the cultural heritage assessment where these have informed the identification of receptors and resources and their sensitivity; the assessment methodology; the potential for significant environmental effects; and required mitigation. These policies are detailed below.

National Guidance

6.2.4. Other national practice guidance of relevance to this cultural heritage assessment which have been taken into account includes the following:

- National Planning Practice Guidance (PPG) (MHCLG, 2018).
- Historic Environment Good Practice Advice in Planning Note 2 (GPA2). Managing Significance in Decision Taking in the Historic Environment (Historic England, 2015).
- Historic Environment Good Practice Advice in Planning Note 3 (GPA3). The Setting of Heritage Assets (2nd edition), (Historic England, 2017).

Local Planning Policy

6.2.5. Local planning policies of relevance to this cultural heritage assessment which have been taken into account includes the following:

- 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 (DCiC), 2017a).
- City of Derby Local Plan Review: Policies E18, E19, E21 and E22 (DCiC, 2017b).
- Erewash Borough Council (EBC) Core Strategy: Policy 11 (EBC, 2014a).
- Erewash Borough Local Plan Saved Policies: Policy EV5, EV6, EV7, EV8 and EV9 (EBC, 2014b).

World Heritage Convention

6.2.6. 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 (see Appendix 6.1 [TR010022/APP/6.3] for a list of international conventions and guidance with reference to undertaking the HIA). The World Heritage Convention was adopted by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in 1972 and came into force in 1975. The UK ratified the Convention on 29 May 1984.

6.2.7. In signing the Convention, the UK Government has undertaken to identify, protect, conserve, present and transmit its World Heritage properties to future generations. 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.

Derwent Valley Mills WHS Management Plan

- 6.2.8. The Derwent Valley Mills WHS Management Plan 2014 sets out a framework for the management of the WHS (Derbyshire County Council (DCC), 2014); Its primary purpose is to maintain the OUV of the WHS. The WHS Management Plan 2014 includes the following aims:
- a) Aim 1: protect, conserve and enhance the OUV of the Derwent Valley Mills WHS.
 - b) Aim 2: promote public awareness of and access to the Derwent Valley Mills WHS.
 - c) Aim 3: promote the development of sustainable tourism within the Derwent Valley Mills WHS.

6.3. Assessment methodology

Relationship between the EIA and HIA

- 6.3.1. This ES chapter is the primary document which reports the Scheme impacts and the resulting significance of effects for cultural heritage assets. It reports the impacts on all designated and non-designated heritage assets, including the Derwent Valley Mills WHS.
- 6.3.2. The purpose of the HIA presented in Appendix 6.1 [TR010022/APP/6.3] is to assess the potential negative and positive impacts of the Scheme on the OUV of the Derwent Valley Mills WHS in accordance with International Council on Monuments and Sites (ICOMOS) Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (ICOMOS, 2011). The HIA addresses both designated and non-designated heritage assets that contribute 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 (SoOUV) (UNESCO, 2010).

Guidance

- 6.3.3. This cultural heritage assessment has been undertaken in line with the guidance provided by DMRB, with specific reference to the following:
- DMRB Volume 10 Environmental Design and Management, Section 6 Archaeology, Part 1 HA 75/01 Trunk Roads and Archaeological Mitigation (Highways Agency, 2001).
 - DMRB Volume 11 Environmental Assessment, Section 2, Part 5, Assessment and Management of Environmental Effects HA 205/08 (Highways Agency, 2008).
 - DMRB Volume 11 Environmental Assessment, Section 3, Part 2, Cultural Heritage HA 208/07 (Highways Agency, 2007a).
- 6.3.4. Since the publication of this guidance in 2007, national policy has been revised, and updated guidance has been issued by English Heritage/Historic England, particularly in respect of the conservation and setting of heritage assets. This is contained within NPSNN, NPPF, PPG, GPA2 and GPA3. The guidance within these documents has been taken into account in this assessment.

Baseline data sources

6.3.5. The following sources of information have been reviewed and forms the basis of the assessment for cultural heritage:

- National Heritage List for England (NHLE).
- Historic England Archive.
- DCC 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 for Highways England (2015) (refer to Appendix 10.3 [TR010022/APP/6.3]), and a Ground Investigation Report (Highways England, 2018) (refer to Appendix 10.1 [TR010022/APP/6.3]).
- Derwent Valley Mills WHS Research Framework (Knight, 2016).
- Updated Research Agenda and Strategy for the Historic Environment of the East Midlands (Knight et al., 2012).
- Derwent Valley Mills WHS Management Plan 2014 - 2019 (DCC, 2014).

6.3.6. As described in Section 6.7, these data sources have been augmented by a programme of non-intrusive and intrusive archaeological field investigations (remote sensing, borehole investigation and trial trenching).

6.3.7. In addition, the cultural heritage study also draws on data from other environmental technical disciplines reported within this ES which have contributed to the assessment, including Chapter 7: Landscape and Visual Impact Assessment, Chapter 9: Noise and Vibration, and Chapter 10: Geology and Soils.

Methodology for determining effects

6.3.8. The assessment of impacts on cultural heritage assets has been undertaken in accordance with the methodology described in DMRB Volume 11, Section 3, Part 2 (HA 208/07) (Highways Agency, 2007a). This is a Detailed Assessment as described in paragraph 3.9 of HA 208/07, which is the level required when there is the potential for significant effects on cultural heritage resources.

6.3.9. The overall approach to the assessment of the significance of cultural heritage effects is in line with DMRB Volume 11, Section 2, Part 5 (HA 205/08) (Highways Agency, 2008). This provides guidance on the assessment and management of environmental effects, including advice on determining the magnitude of impacts and the significance of effects.

- 6.3.10. HA 208/07 splits the cultural heritage resource into three separate, but related sub-topics, namely i) archaeological remains; ii) historic buildings; and iii) historic landscapes. For each sub-topic, guidance is provided with regard to the assessment of value (of the resource) and also impact types and impact magnitude. An overall significance of effect for each identified asset is reached by combining value and impact magnitude within a matrix. The results for each cultural heritage sub-topic are then described to provide a statement on the significant effects for the Scheme. The process is explained in more detail below within paragraphs 6.3.11 to 6.3.24 and Tables 6.2 to 6.6.
- 6.3.11. The 'value' of archaeological remains, a historic building or a historic landscape reflects its significance as a heritage asset and, therefore, its sensitivity to change. For the purposes of this assessment, and in accordance with the terminology of DMRB, the term 'value' is used in preference to 'significance' within this chapter.
- 6.3.12. NPSNN (para 5.122) defines significance (i.e. 'value' in DMRB terms) as follows: "The sum of the heritage interests that a heritage asset holds is referred to as its significance. Significance derives not only from a heritage asset's physical presence, but also from its setting." In paras 5.123 - 25 the NPSNN goes on to state that designated assets are those that have been recognised as being of higher importance and worthy of protection. However, it should not be assumed that all non-designated assets are of a lower significance as they may not have been the subject of any previous investigation or assessment and further research may indicate that they merit designation or statutory protection.
- 6.3.13. The assessment of the value of a heritage asset includes a consideration of its archaeological, historic, architectural and artistic interests and the extent to which that significance relates to different elements of the asset and to what extent the setting of a heritage asset adds to or detracts from its significance.
- 6.3.14. The assessment includes, where appropriate, assessment of any evidence for the potential reduction of value due to former changes in condition, such as the truncation or the erosion of archaeological deposits, alterations to a building, or severance or removal of a historic landscape feature etc.
- 6.3.15. DMRB Volume 11, Section 3, Part 2, HA 208/07, Annex 5 Archaeological Remains, Annex 6 Historic Buildings and Annex 7 Historic Landscape (Highways Agency, 2007a) set out guidance on the criteria used for establishing the value of heritage assets comprising archaeological remains, historic buildings, and historic landscape features. The criteria have been adapted and combined and each heritage asset has been assigned a value utilising Table 6.2.
- 6.3.16. Within the assessment, all assets which contribute to the OUV of the WHS have been assigned a very high value.

Table 6.2: Criteria to determine the value of heritage assets

Value	Description
Very High	<ul style="list-style-type: none"> • Assets inscribed as being of universal international importance, such as WHS (including nominated sites). • Assets of acknowledged international importance. • Assets that contribute significantly to acknowledged international research objectives. • Buildings of recognised international importance. • Historic landscapes of international value, whether designated or not. • Extremely well preserved historic landscapes with exceptional coherence, time-depth or other critical factor(s).
High	<ul style="list-style-type: none"> • Scheduled monuments with extant remains, or sites and remains of comparable quality. • Assets that contribute significantly to acknowledged national research objectives. • Grade I and grade II* listed buildings. • Other listed buildings that can be shown to have exceptional qualities in their fabric or historical association not adequately reflected in their listing grade, including non-designated structures of clear national importance. • Conservation areas containing very important buildings. • Designated and non-designated historic landscapes of outstanding interest of high quality and importance, and of demonstrable national value.
Medium	<ul style="list-style-type: none"> • Designated or non-designated assets that contribute to regional research objectives. • Grade II listed buildings. • Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historic association. • Conservation areas containing important buildings. • Historic Townscape or built-up areas with historic integrity in their buildings, or built settings (e.g. including street furniture and other structures). • Designated special historic landscapes and non-designated landscapes that would justify special historic landscape designation, landscapes of regional value.
Low	<ul style="list-style-type: none"> • Sites of low importance. • Assets compromised by poor preservation and/or poor survival of contextual associations. • Locally listed buildings. • Historic (unlisted) buildings of modest quality in their fabric or historical association. • Historic Townscape or built-up areas of limited historic integrity in their buildings, or built settings (e.g. including street furniture and other structures). • Non-designated historic landscapes. • Historic landscapes with importance to local interest groups.

Value	Description
Negligible	<ul style="list-style-type: none"> Assets with very little or no surviving archaeological interest. Buildings of no architectural or historical note; buildings of an intrusive character. Landscapes with little or no significant historical interest.
Unknown	<ul style="list-style-type: none"> Assets the importance of which has not been ascertained.

Source: DMRB Volume 11, Section 3, Part 2, HA 208/07, Annexes 5, 6 and 7 (Highways Agency, 2007a)

Magnitude of impact

- 6.3.17. Impacts may arise during Scheme construction or operation and can be temporary or permanent, and direct or indirect. Impacts can occur to the physical fabric of the asset or affect its setting. Impacts upon fabric would be adverse, whilst those upon setting may be either beneficial or adverse.
- 6.3.18. For impacts on archaeological remains, HA 208/07 gives the following table of factors to be used in the assessment of magnitude of impact (refer to Table 6.3).

Table 6.3: Factors in the assessment of magnitude of impact: archaeological remains

Impact magnitude	Factors
Major	<ul style="list-style-type: none"> Change to most or all key archaeological materials, such that the resource is totally altered. Comprehensive changes to setting.
Moderate	<ul style="list-style-type: none"> Changes to many key archaeological materials, such that the resource is clearly modified. Considerable changes to setting that affect the character of the asset.
Minor	<ul style="list-style-type: none"> Changes to key archaeological materials, such that the asset is slightly altered. Slight changes to setting.
Negligible	<ul style="list-style-type: none"> Very minor changes to archaeological materials, or setting.
No change	<ul style="list-style-type: none"> No change.

Source: DMRB Volume 11, Section 3, Part 2, HA 208/07, Annex 5, Table 5.3 (Highways Agency, 2007a)

- 6.3.19. For impacts on historic buildings, HA 208/07 provides the following table of factors to be used in the assessment of magnitude of impacts (refer to Table 6.4).

Table 6.4: Factors in the assessment of magnitude of impact: historic buildings

Impact magnitude	Factors
Major	<ul style="list-style-type: none"> • Change to key historic building elements, such that the resource is totally altered. • Comprehensive changes to setting.
Moderate	<ul style="list-style-type: none"> • 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.
Minor	<ul style="list-style-type: none"> • 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.
Negligible	<ul style="list-style-type: none"> • Slight changes to historic building elements or setting that hardly affect it.
No change	<ul style="list-style-type: none"> • No change to fabric or setting.

Source: DMRB Volume 11, Section 3, Part 2, HA 208/07, , Annex 6, Table 6.3 (Highways Agency, 2007a)

- 6.3.20. HA 208/07 (Highways Agency, 2007a) explains that historic landscapes cannot be destroyed, but that impacts on them can change their character (Annex 7, para. 7.12.1). Impacts should be assessed using evaluated historic landscape character units, not the elements/parcels/components that contribute towards that character. There may be impacts resulting from changes within the settings of identified units, especially with regard to designated historic landscapes.
- 6.3.21. For impacts on the historic landscape, HA 208/07 gives the following table of factors to be used to assess the magnitude of impacts (refer to Table 6.5).

Table 6.5: Factors in the assessment of magnitude of impact: historic landscape

Impact magnitude	Factors
Major	<ul style="list-style-type: none"> • 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.
Moderate	<ul style="list-style-type: none"> • Changes 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.
Minor	<ul style="list-style-type: none"> • Changes 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 changes to historic landscape character.

Impact magnitude	Factors
Negligible	<ul style="list-style-type: none"> 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.
No change	<ul style="list-style-type: none"> No change to elements, parcels or components; no visual or audible changes; no changes arising from amenity or community factors.

Source: DMRB Volume 11, Section 3, Part 2, HA 208/07, Annex 7, Table 7.3 (Highways Agency, 2007a)

Significance of effect

6.3.22. An assessment of the level of effect significance, having taken into consideration any embedded and additional mitigation, is determined by cross-referencing between the value of the asset (as per Table 6.2) and the magnitude of impact (as per Table 6.3, Table 6.4 and Table 6.5). The resultant level of effect set out in Table 6.6 can be adverse or beneficial.

Table 6.6: Significance of effect matrix

		Magnitude of impact				
		No change	Negligible	Minor	Moderate	Major
Value	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

Source: DMRB Volume 11, Section 3, Part 2, HA 208/07, Table 5.1 (Highways Agency, 2007a)

6.3.23. The matrix is a guide to decision-making only, allowing for the application of professional judgement. Where the significance of effects matrix presented in Table 6.6 allows for two levels of significance (e.g. slight/moderate, large/very large), professional judgement has been used on a case by case basis to determine the appropriate level of effect significance.

6.3.24. The ES reports on the significant effects. Effects that are moderate, large and very large are considered to be significant (refer to Chapter 4 Environmental Impact Assessment Methodology, para. 4.3.16), whilst effects that are neutral and slight are not deemed to be significant. A precautionary approach has been adopted, such that all slight adverse effects have been reviewed to confirm that these are not significant.

Assessment of the setting of heritage assets

6.3.25. The assessment of the setting of heritage assets has been undertaken in accordance with principles set out in the NPPF, and advice provided in NPSNN and Historic England's Good Practice Advice Guide GPA3: The Setting of Heritage Assets, 2nd edition (Historic England, 2017).

- 6.3.26. The second edition of GPA3 (published December 2017) supersedes both the original 2015 edition of GPA3 and also the 2011 English Heritage document *Seeing the History in the View: A Method for Assessing Heritage Significance within Views* (English Heritage, 2011). GPA3 addresses the complexities associated with decision-making associated with the setting of heritage assets. The document describes the key terms of curtilage, character and context, and considers the extent of setting, emphasising that this should be considered on an asset-by-asset basis. It also highlights the importance of views to the understanding of setting, and indicates the types of views that could contribute to the significance (or value) of a heritage asset.
- 6.3.27. This assessment adopts the stepped approach advocated by GPA3, 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 impacts 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.
- 6.3.28. Steps 1 to 3 have been undertaken within this assessment and are reported in Section 6.10. Steps 4 and 5 have been taken into account when developing the Scheme design and formulating embedded mitigation (refer to Section 6.14).

Assessment of harm to designated heritage assets

- 6.3.29. The NPSNN requires the Secretary of State to consider whether the impacts of the Scheme on a designated heritage asset amounts to substantial or less than substantial harm to its significance. The assessment of harm is detailed in the NPSNN Accordance Table submitted with the DCO application [TR010022/APP/7.2].

Scoping

- 6.3.30. The proposed scope of the cultural heritage assessment was detailed in the EIA Scoping Report (Highways England, 2018) submitted to The Inspectorate on 15 March 2018 (refer to para. 1.3.5).
- 6.3.31. An overview of the Inspectorate's Scoping Opinion (refer to Appendix 4.1, [TR010022/APP/6.3]) in relation to cultural heritage is presented in Table 6.7. Where the assessment has been undertaken in accordance with the Scoping Opinion point, a response and the relevant ES section is provided; where an alternative approach has been agreed with the relevant stakeholders, an explanation is provided.

Table 6.7: Scoping opinion and response

Scoping Opinion	Where addressed within the ES
Planning Inspectorate	
<p>Paragraph 2-2-5 of the ICOMOS guidance suggests that the scope of HIA will be agreed with the consultation bodies identified at paragraph 7.8.7 of the Scoping Report (including the World Heritage site team at DCC), the public and community representatives. The ES should demonstrate the effort made to agree the scope of the HIA.</p> <p>The ES should set out details of consultation with UNESCO and the Department for Culture Media and Sport (DCMS), where relevant, with regards to any effects on the WHS.</p>	<p>The scope of the HIA was agreed with applicable consultation bodies through submission of an HIA Scoping Report. The scope and methodology for the HIA is set out in Appendix 6.1 [TR010022/APP/6.3].</p> <p>Consultation requirements were discussed with Historic England who confirmed that they would consult with DCMS and that their advice would be that that significant impacts upon the OUV of the WHS are unlikely. On that basis, notification of the Scheme by the State Party to UNESCO is unlikely to be necessary i.e. it does not appear to be a case that requires a notification to Paris by DCMS.</p>
Derby City Council (DCiC)	
<p>Paragraph 7.2.2: The local plan policies are incorrect. Policy E29 has been deleted and it doesn't reference any of the DCLP1 policies for heritage (CP20 & AC9).</p>	<p>The correct local plan policies have been included herein - refer to Section 6.2: Local Planning Policy.</p>
<p>Within the scoping report I note that the listed buildings at Markeaton and the Markeaton Conservation Area are mentioned and their settings are an important part of the listing. I would strongly suggest referring to the Historic England Guidance on setting (which is mentioned within the document).</p>	<p>Refer to para. 6.3.25.</p>
<p>There is also a need to mention the historic Markeaton Park with its stone walls, reinstated gateway to the A52 and open spaces. There are also a number of heritage assets (like the AR Centre) which are located very near to the A38 and their function and setting will have to be assessed. These are non-designated heritage assets but still, as outlined in the NPPF important.</p>	<p>Refer to Section 6.9 and Section 6.15.</p>
<p>There are a number of locally listed buildings nearby within the New Zealand area of Derby off and along Ashbourne Road, off and along Kedleston Road that need, in my view, to be included.</p>	<p>Refer to Section 6.10 and Appendix 6.2 [TR010022/APP/6.3].</p>
<p>Conservation Areas nearby which need to be looked at are listed but the following ones are missing from the list- Friar Gate Conservation Area (as this extends up Ashbourne Road), and perhaps even Leylands Estate CA, and Darley Abbey CA.</p>	<p>Refer to Section 6.10 and Appendix 6.2 [TR010022/APP/6.3].</p>

Scoping Opinion	Where addressed within the ES
The Derwent Valley Mills WHS, buffer zone and its setting.	Refer to Section 6.3, Section 6.11, and Appendix 6.1 [TR010022/APP/6.3].
In order to be able to assess a planning application for these works and fully understand the impact on these assets, in accordance to the Saved Local Plan Review Policies and the NPPF, there is a need for a thorough Heritage Impact Assessment and views analysis, from near and further away (not just in relation to the WHS), to establish with verified views the impact of these proposals.	Refer to Appendix 6.1 [TR010022/APP/6.3].
Derby City Council was also consulted on the HIA Scoping Report on 03/10/2018 and again on 18/10/2018 – no comments were received.	-
Derbyshire County Council (DCC)	
The importance of the Outstanding Universal Value (OUV) of the Derwent Valley Mills WHS is appropriately highlighted and referenced throughout Chapter 7 of the Scoping Report, which is welcomed and supported. It is noted (paragraph 7.1.2) that a separate Heritage Impact Assessment (HIA) Scoping Report will be produced to specifically address the scope of works for the Heritage Impact Assessment on the OUV, integrity and authenticity of the WHS and to inform the Scheme design and mitigation, which is fully supported and welcomed. It is recommended, however, that this scoping document should be subject to consultation with the relevant heritage consultees, to include as a minimum the World Heritage Site Team at Derbyshire County Council, and Historic England, which has been indicated at Section 7.8.7 of the Scoping Report.	The scope and methodology for the HIA is set out in Appendix 6.1 [TR010022/APP/6.3]; consultation responses to the HIA Scoping Report are also set out in the HIA.

6.4. Consultation

- 6.4.1. In relation to cultural heritage, consultation meetings have been held with DCiC, DCC and Historic England (July 2018). Consultation was held regarding the EIA Scoping Report and to discuss potential impacts on heritage resources, methodologies, survey requirements, as well as the development of the HIA Scoping Report. Consultees comments are provided in Table 6.8.

Table 6.8: Consultee comments

Consultation comment	Outcome
DCiC	
The Conservation Officer confirmed that the comments contained within the Planning Inspectorate Scoping Opinion related to the 2016 screening. But that the following comments relate to the Scoping Report.	-
A flexible approach to the study area is appropriate but all assets within a study area should be identified to show that they had been considered, including conservation areas.	A variable study area has been used in the assessment for designated and non-designated assets. All assets have been identified. See Section 6.6 and Sections 6.8 to 6.11.
Boundary wall at Markeaton Park is a heritage asset and the stone should be re-used in the relocated wall.	The boundary wall has been identified as a separate asset for the EIA and included in the walkover. See Section 6.14.
Territorial Army Centre (Kingsway Army Reserve Centre) opposite Markeaton Park is not included on the local list but it is considered to be a heritage asset as it is likely to have links with military activity in the park during the war.	The Army Reserves Centre was assessed during the walkover and included as an asset for the EIA. See Section 6.9.
Heritage Impact Assessment. Derwent Valley Mills WHS does have monitored views and these should be identified, together with visualisations as part of the assessment, including for the proposed flood compensation area at Little Eaton junction.	The cultural heritage team has liaised with WHS planning co-ordinator regarding key views – refer to Appendix 6.1 [TR010022/APP/6.3].
DCC	
The A38 at Little Eaton was an important gateway into the WHS. Concerns were raised about what design options were considered as the Scheme included a substantial embankment and flood compensation area which would introduce new earthworks into the historic floodplain.	Design options are discussed in Section 6.14. Also refer to Chapter 3: Scheme History and Assessment of Alternatives.
Derwent Valley Mills WHS, apart from the official monitored viewpoints there would be other key views around Little Eaton, including those from the Derwent Valley Heritage Way that should be considered for the assessment.	The cultural heritage team has liaised with WHS planning co-ordinator regarding key views – refer to Appendix 6.1 [TR010022/APP/6.3].
The proposed flood compensation area at Little Eaton (including attenuation ponds proposed at Little Eaton) should be sympathetically and sensitively designed to fit into the landscape. The existing proposal would have an impact on the historic landscape at least at construction, but if appropriately designed is not expected to be a significant issue.	The layout of the floodplain compensation area at Little Eaton junction and other Scheme features have taken into account the presence of the WHS. Impacts have been assessed in the EIA and the HIA. See Section 6.15.
The County Archaeologist deferred to the advice of the WHS advisory team on this matter based on discussion undertaken with the team at the planning stage. The work on the HIA should be carried out in accordance with the guidance of ICOMOS as advisors on World Heritage to UNESCO.	The HIA has been undertaken in accordance with ICOMOS guidance. See Appendix 6.1 [TR010022/APP/6.3].

Consultation comment	Outcome
Historic England	
Following The Planning Inspectorate ("the Inspectorate") comments Historic England would confirm the procedure for consulting with UNESCO.	Historic England confirmed that their advice to the DCMS is that significant impact upon OUV is unlikely. On that basis notification of the Scheme by the State Party to UNESCO is unlikely to be necessary i.e. it does not appear to be a case that requires a notification to Paris by DCMS.
Advised that the assessment should include assets that contribute to the OUV of the WHS, including evidence for early transportation routes.	Impacts on the OUV of the WHS have been included in the HIA. See Appendix 6.1 [TR010022/APP/6.3].
The potential visual intrusion of the proposed new embankment at Little Eaton junction and the proposed flood compensation area would need appropriate assessment. Potential relevant viewpoints included those from Kedleston Hall, Breadsall conservation area, and along river floodplain, particularly Derwent Valley Heritage Way that crosses beneath the existing A38 at Little Eaton, and the river itself.	Assets and setting have been assessed during the heritage walkover. Potential Scheme effects are detailed in Section 6.15. Also refer to Chapter 7: Landscape and Visual.
Important that the proposed flood compensation area at Little Eaton is blended back into the landscape and spoil heaps should not be leftover.	The layout of the floodplain compensation area and other Scheme features have taken into account the presence of the WHS. No spoil heaps would be left in the area. See Section 6.14.
At Markeaton Park it is important that the development of this part of the park is understood and that any unavoidable alterations should be designed to be sympathetic to the asset.	Impacts upon Markeaton Park have been assessed during the heritage walkover. The development of the park is described herein - see Section 6.8 and 6.9.
Erewash Borough Council (EBC)	
EBC had no comment on the scope of the ES chapter and offered no conservation contact with which to discuss the scope.	No amendments made to scope.
EBC was consulted on the HIA Scoping Report, but they did not provide any comments on the document and confirmed that they were happy for the assessment to proceed.	No amendments to the scope of the HIA.

6.4.2. The Preliminary Environmental Information Report (PEIR) was published in September 2018 (Highways England, 2018) and presented the environmental information collected together with the preliminary findings of the assessment of likely significant environmental effects of the Scheme at the time. Cultural heritage consultees comments on the PEIR are provided in Table 6.9.

Table 6.9: Consultee comments on the PEIR

Consultation comment	Outcome
DCiC	
<p>Markeaton Park is a heritage asset and the stone walls that enclose the park are an important part of the enclosure of the park. I suggest that as much of the wall is retained in the original location. If any walls are to be affected by this proposal I suggest that it is reused and the location where it is to be reused agreed.</p>	<p>The boundary wall has been identified as a separate asset for the EIA and included in the walkover. The part of the boundary wall which would be impacted by the Scheme would be carefully dismantled and rebuilt on a new alignment that is sympathetic to the significance of Markeaton Park (see Section 6.14).</p>
<p>The Heritage Lottery gave a grant for the park including the relocation of the original park gates and railings to a low wall adjacent to Ashbourne Road. I suggest these are kept in this location.</p>	<p>The gates installed to articulate the historic park entrance would not be affected by the Scheme and would remain <i>in-situ</i>, although the utility diversion corridor would bring construction activities close to the structure and thus the gates would need to be protected during the construction phase (see Section 6.15).</p>
<p>I suggest part of the character of this part of the park is its tree cover. I suggest that any loss of trees should result in appropriate tree planting in an agreed location.</p>	<p>Ecological mitigation works are proposed within Markeaton Park to mitigate some ecological effects associated with the Scheme (includes creation of a species rich grassland) – such works would also enhance the environment within the public open space (see Section 6.14).</p>
<p>My main concern at this junction is the flood compensation storage area which is located within the Derwent Valley Mills WHS. This is near to an area (North Avenue Planning Public Enquiry) where there was a proposal for housing which was refused and dismissed at public enquiry. The character of this area, and its rural nature, is very sensitive. The proposal would have a harmful impact on the Outstanding Universal Value of the Derwent Valley Mills WHS. I strongly suggest that other locations outside of the WHS and its buffer zone are looked at if this is needed.</p>	<p>As detailed in Chapter 3: Scheme History and Assessment of Alternatives, Table 3.10, numerous locations for floodplain compensation have been subject to evaluation. 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 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 (refer to Figure 2.10 [TR010022/APP/6.2]). 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. As detailed in Appendix 6.1</p>

Consultation comment	Outcome
	[TR010022/APP/6.3] and Section 6.15, the floodplain compensation area would not have a significant effect upon the WHS.
DCC	
Issue is taken with the conclusion that there will be 'neutral' effects on archaeological heritage assets, including potential archaeological and palaeo-environmental deposits along the River Derwent floodplain	Surveys to investigate and understand the archaeological potential of the river floodplain have been completed with the approval of the DCC archaeologist and have contributed to this assessment (see Section 6.7).
In relation to the Derwent Valley Mills WHS, the commentary at 6.6.4 appears unduly restricted to direct impacts and does not consider the potential of impacts to OUV through visual harm, particularly in relation to the rural/urban relationship in the landscape which forms a key component of OUV.	The HIA (Appendix 6.1 [TR010022/APP/6.3]) considers both tangible and intangible values and visual and non-visual aspects of the setting of assets that express attributes of OUV.
Historic England	
We are content that the ICOMOS guidelines are being followed and that the Heritage Impact Assessment focussing on the WHS will address issues which might not be so well covered within the structural constraints of the main Environmental Impact Assessment. With regard to the A38 Junctions Scheme's impact upon the OUV of the Derwent Valley WHS our advice to the Department for Digital Culture Media and Sport is that significant impact upon OUV is unlikely. On that basis notification of the scheme by the State Party to UNESCO is unlikely to be necessary i.e. it does not appear to be a case that requires a notification to Paris by DCMS.	The HIA has assessed the potential negative and positive impacts of the Scheme, in accordance with ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties – refer to Appendix 6.1 [TR010022/APP/6.3].
The HIA (/EIA) will need to include an assessment of assets that contribute to the OUV, and it will also need to consider impacts from associated accommodation works (working areas, compound areas and service diversions). The potential visual intrusion of the proposed new embankment at Little Eaton junction and the proposed flood compensation area would need appropriate assessment. Potential relevant viewpoints included those from Kedleston Hall, Breadsall conservation area, and along the river floodplain, particularly the Derwent Valley Heritage Way that crosses beneath the existing A38 at Little Eaton, and the river itself.	Impacts on the OUV of the WHS have been included in the HIA. See Appendix 6.1 [TR010022/APP/6.3].
At the Little Eaton Junction it would be important for the flood compensation area to be blended back into the existing natural landscape and that no spoil heaps should be leftover. The difference between the existing situation and the impact of the flood compensation area could be demonstrated using visualisations. If	The floodplain 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

Consultation comment	Outcome
<p>appropriately designed, the long term effect of the proposed flood compensation area is not expected to be a significant issue (noting that this will be assessed and confirmed in the Environmental Statement /EIA/HIA). In the context of Little Eaton palaeo-channels could be present within the floodplain and Steve Baker (DCC Archaeologist) should be contacted regarding previous studies along the Derwent.</p>	<p>agricultural use (refer to Figure 2.10 [TR010022/APP/6.2]). 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. As detailed in Appendix 6.1 [TR010022/APP/6.3] and Section 6.15, the floodplain compensation area would not have a significant effect upon the WHS.</p> <p>Surveys to investigate and understand the archaeological potential of the river floodplain have been completed with the approval of DCC archaeologist and have contributed to this assessment (see Section 6.7).</p>
<p>At Markeaton Park the development of this part of the park should be understood and any unavoidable alterations should be designed so that they are sympathetic to the asset.</p>	<p>The development of Markeaton Park entrance has been assessed using a variety of historical sources, including documents, maps, aerial photographs and paintings. The entrance and its associated historical features were also part of the walkover survey to inform this assessment.</p>

6.5. Assessment assumptions and limitations

6.5.1. The information gathered as described herein is considered sufficient to provide the basis for the EIA. The following limitations and assumptions apply:

- This assessment is based upon the Scheme design and details regarding Scheme construction and operation as provided in Chapter 2: The Scheme.
- Farmland that is close to the existing Little Eaton junction is assumed not to have been impacted by previous development and consequently this has been the focus of archaeological investigative surveys (see Section 6.7). Additional surveys may be required where it was not feasible to undertake evaluates prior to public examination. It is assumed that the majority of other green space required for the Scheme at Kingsway and Markeaton junctions has been impacted by previous development. A small strip of land adjacent to Bramble Brook within the Kingsway hospital site was due to be subject to archaeological survey, although such plans had to be withdrawn due to safety concerns regarding interactions with adjacent construction activities.
- It is assumed that alluvial deposits have been removed within the footprint of the existing Little Eaton junction.
- The correctness and completeness of the NHLE and HER databases is assumed.
- Available LiDAR data was supplied by Highways England with a resolution of 0.25m.
- Access for heritage walkover surveys has been comprehensive, with most assets directly visited or observed from adjacent rights of way.

6.6. Study area

- 6.6.1. A study area for the cultural heritage EIA extends to a maximum of 1km from the Scheme boundary in order to assess the potential effects of the Scheme on designated heritage assets. For non-designated heritage assets the study area extends to 500m from the Scheme boundary. All elements of a heritage asset which falls inside the 1km study area have been considered where they convey the attributes of OUV of the Derwent Valley Mills WHS to ensure a comprehensive assessment of effects. Additional heritage assets beyond the study area have also been included for assessment. In particular, the study area was extended south of Little Eaton junction, to capture the assessment of an important receptor at Darley Abbey and its associated assets. Identification of additional heritage assets has drawn on the Zone of Theoretical Visibility (ZTV) (refer to Chapter 7: Landscape and Visual Impact Assessment) and professional judgement. The study area is shown on the figures that show the location of cultural heritage assets (refer to Figures 6.1 to 6.6 [TR010022/APP/6.2]).
- 6.6.2. The HIA considers and assesses the impact of the Scheme on attributes of the OUV of the WHS, including the setting and relationships between the buildings and monuments within the visual envelope of the WHS at Little Eaton junction (refer to Appendix 6.1 [TR010022/APP/6.3]). The HIA study area comprises both the WHS and buffer area that surrounds it and its setting.
- 6.6.3. Within this ES chapter, the Derwent Valley Mills WHS is considered under the historic landscape topic (refer to Section 6.11).

6.7. Previous investigations close to the Scheme

Kingsway and Markeaton junctions

- 6.7.1. In 2012 a geophysical survey (EDR3385) was carried out in advance of proposed re-development of the Kingsway hospital site (Webb, 2012) which are close to and within the Scheme boundary. Substantial ground disturbance was recorded, including linear features presumed to be services and a large square area that probably marks a former bowling green. Some anomalies were indicative of ridge and furrow features, field boundaries and land drains, but the archaeological potential for the site was considered to be low. Trial trenching in two areas close to the Uttoxeter Road in 2013 (EDR3121) found no archaeologically significant features, although there was evidence of medieval ridge and furrow and post-medieval field boundaries and drainage (Joyce, 2013). Additional trenching approximately 150m east of the Scheme (EDR3122) identified more medieval furrows and evidence of 19th Century landscaping activity (Joyce, 2014).
- 6.7.2. Archaeological watching brief (EDR2708) during enabling works for a staff car park at Derby City General Hospital in 2009 found that much of the site had been heavily truncated by recent activity (Hogg, 2009). No archaeological remains features were identified.
- 6.7.3. In 2008 a trial trench evaluation on former allotments at Ashbourne Road, Derby (EDR2624), approximately 250m east of Markeaton junction produced evidence of past land drainage and water storage, but there was no evidence for Roman or medieval activity apart from a single residual sherd of Roman Samian pottery (Forrester, 2008).

Little Eaton junction

- 6.7.4. Earthwork recording was carried out along a section of the Buxton to Derby Roman Road between Darley Park and Duffield (EDR3777) (Farnsworth, 2003) to match sections of the road between Darley Park and Duffield with earthwork features.
- 6.7.5. Trial trench evaluation at North Avenue, Darley Abbey (EDR3966), south of Holme Nook Farm, found no evidence for the conjectured line of a Roman road, but modern disturbance (made ground and backfill) was recorded that indicates the area has recently been used as a works storage/working area (Mora-Ottomano, 2015).

Results of archaeological investigations carried out for the Scheme

- 6.7.6. In 2016 AECOM commissioned an archaeological investigation at Little Eaton junction which involved the following:
- Archaeological geophysical survey (detailed magnetometry) in six areas to the east and south of the existing A38 road alignment (Durkin, 2016).
 - Geo-archaeological assessment of ten boreholes through River Derwent floodplain deposits (McLellan, 2016).
 - Trial trench evaluation to ground truth the anomalies detected by geophysical survey (Parker, 2016).
- 6.7.7. The trenching (nine trenches opened) produced traces of a medieval/post-medieval cultivation system (furrows belonging to a ridge and furrow field system) and a ditch of post-medieval date. These investigations produced a small assemblage of late medieval, post-medieval and modern material (pottery, fragments of clay pipe, glass, slate and lead), and confirmed the presence of historic cultivation features that had been detected by archaeological geophysical survey (EDR4478). The geo-archaeological boreholes, drilled to a depth of between 3m to 4m, found that a modern topsoil overlies an alluvial clay and sand deposit (alluvial deposits are effective in burying and preserving archaeological remains). All the cores were archaeologically sterile apart from two holes which produced coarse grained ceramic material (brick) that is not considered to be significant (McLellan, 2016).
- 6.7.8. Separately archaeological monitoring of ground investigations was undertaken next to Little Eaton junction in 2016 (8 trial pits), although this did not identify any archaeological remains. In addition, more extensive borehole data that covered all three junctions (Kingsway, Markeaton and Little Eaton junctions) was assessed for its archaeological potential and used to model below ground conditions (Spur, 2017). No peaty deposits or highly organic layers were found within the assessed holes. At Kingsway junction it was found that made ground deposits are extensive and in places substantial, but that very little remains of the alluvial deposits. Markeaton junction occupies the southern valley side of Markeaton Brook with localised deposits of colluvium at the base of the terrace slope. Alluvial deposits were found to be negligible, but may be present further to the north-east of the Scheme, on the floodplain of Markeaton Brook. At Little Eaton junction although there was no visible peat deposits, substantial organic material was noted (wood/tree fragments) incorporated within the alluvium and fine plant remains which probably represent the remnants of reed growth across

the wetter areas of the floodplain (Spur, 2017). The presence of undulating sand and gravel deposits under the alluvium suggests there may be abandoned river channels which have the potential to act as important 'sumps' for organic material.

- 6.7.9. Features visible in the LiDAR data suggest that there are infilled channels in the floodplain, particularly in the area between the railway line and the river terrace below Allestree (refer to Figure 6.7 [TR010022/APP/6.2]). To the east of the railway line it appears that these are obscured by the remains of ridge and furrow cultivation and associated features. Ridge and furrow is extensive, particularly north of Croft Lane at Breadsall (either side of A61); and also by ground disturbance (site of a former landfill north of Little Eaton junction).
- 6.7.10. Archaeological surveys completed during the winter months of 2018 - early 2019 investigated additional areas that would be impacted by the Scheme. The investigation did not find anything of note that would have implications for the assessment as presented herein.
- 6.7.11. The geophysical survey detected a number of linear anomalies in a field south-east of Little Eaton junction and in a field west of the River Derwent between the river and the A61 (Durkin, 2018). These were investigated by trial trenching, but the anomalies were consistent with former field boundaries or infilled tributaries or channels of the river. An area of extensive magnetic disturbance was also identified on the terrace next to the A61 which appears to represent disturbed ground.
- 6.7.12. Seven boreholes drilled across the floodplain compensation area next to the River Derwent (at the foot of the river terrace) revealed a uniform stratigraphy composed of alluvium overlying fluvial deposits, but no archaeological remains (Parker, 2019).
- 6.7.13. Trial trenching to the south-east of Little Eaton junction did not confirm the presence of any of the anomalies detected by the geophysical survey (Blues, 2019). One trench (Trench 16) recorded the truncated remains of ridge and furrow earthworks that are likely to be of medieval or post-medieval date. Elsewhere in this area the ploughsoil was found to seal a thick alluvial deposit. Similarly west of the River Derwent the trenches were unable to confirm the presence of any linear features, although they did show that deposits of made ground covered the slopes of the river terrace, possibly indicating that the underlying natural ground had already been impacted, and that undifferentiated alluvium covered the floodplain itself.
- 6.7.14. Topographic survey in the fields next to Trench 16 recorded ridge and furrow earthworks, particularly across the southern part of the survey area where the earthworks exhibited a long sinuous 's-shaped' profile (Parker, 2019). Next to Trench 16 the earthworks were barely discernible. However, at the north-west corner of the survey area a segment of a narrow curving ditch was recorded which crossed from the adjacent field boundary to another ditch along the western boundary of the field (feature also visible on the LiDAR imagery (refer to Figure 6.7 [TR010022/APP/6.2])). This appears to be a drainage channel and first appears on the 1900 Ordnance Survey map (1:2500).

6.8. Historic map regression

Kingsway junction

- 6.8.1. In the 1880s the Scheme footprint at Kingsway junction largely comprises farmland on the edge of Derby where there are a scatter of rural farms including 'Humbleton', 'Thornhill Farm' and 'Rough Heanor', and a number of isolated cottages and country houses, such as Thornhill. The Great Northern Railway Line (Derbyshire and North Staffordshire Extension) crosses the Scheme boundary (the railway line opened in 1878, but was out of use by 1964 and is now dismantled). Bramble Brook is shown to the south. The fields that are present within the study area are largely formed by straight and sinuous field boundaries that are likely to reflect episodes of planned enclosure of post-medieval date, although there are also smaller irregular fields that could have their origins in the medieval to post-medieval periods. A number of works are shown along Uttoxeter Road and the railway line, including three brickyards which are surrounded by extensive extraction areas. Derby Union Workhouse is shown further south, but alongside Uttoxeter Road.
- 6.8.2. Over the next forty years there were no significant changes to the character of the study area, although the Borough Asylum is shown off Uttoxeter Road (1901 1:10560 Ordnance Survey map). The brickworks had also extended as far as Thornhill Farm to the west. There is a recreational ground and pavilion shown to the south of Windmill Hill Lane.
- 6.8.3. The 1:10,560 Ordnance Survey map of 1938 shows 'Kingsway' crossing the north end of the Scheme footprint, between a new junction on Ashbourne Road and Uttoxeter Road. Kingsway Hospital is shown to the north of the Borough Asylum, and there is new housing development at Mackworth (west of Kingsway) and between Friargate and Kingsway, and to the south of Windmill Hill Lane (area became infilled with development in the immediate post-war years and in the 1950s).
- 6.8.4. By the early 1970s the urban character of the north end of Kingsway junction had been established. Humbleton Farm is no longer shown (presumably it had been demolished for development in Mackworth) and in its place is a small urban park. The area of extraction associated with the brickworks was extended up to the edge of Kingsway, also Thornhill Farm is no longer shown (presumably removed by development). The gardens that were part of Thornhill country house were replaced by a bowling green. To the south of the railway line there was some localised loss of field boundaries that had been present in the later 19th Century, and north of the railway there are allotment gardens between Mackworth and Kingsway.
- 6.8.5. At the end of the 1970s there were major changes to Kingsway. A large junction had been built to the north of Kingsway Hospital, crossing the disused railway line and former allotment gardens, and a new section of the A38 trunk road had been built to the south of the junction (part of Bramble Brook appears to have been re-aligned). Apart from the trunk road a series of new link roads were constructed to link it to the older road network. These new roads severed or replaced the fields in the area to the south of the railway line. At Mackworth the allotments were re-located to the south of the railway line.

- 6.8.6. By 1992 industrial estates and commercial retail parks had replaced the former landfill site that succeeded the area of mineral extraction (east of Kingsway junction). Since 2000 the original Kingsway Hospital has been demolished and replaced by residential housing and new hospital buildings next to Kingsway House. The former country house known as Thornhill appears to have been demolished between 2006 and 2014 (part of Thornhill Day Hospital from late 1930s).

Markeaton junction

- 6.8.7. During the late 18th Century Derby expanded rapidly as a result of industrial development, although beyond the periphery of the town the landscape retained its historic rural character during the 18th and 19th Centuries. At the end of the 19th Century the Ordnance Survey map (1883) shows Markeaton junction as having a semi-rural character alongside the developing city and historic Markeaton Park (adjacent to Ashbourne Road). Properties and works extend off Ashbourne Road as far as Windmill Hill Lane, and along Kedleston Road to the north. Markeaton Park is depicted as unenclosed parkland which extends south of Markeaton Hall as far as Ashbourne Road (the edge of the park appears to be demarcated by a boundary of trees on all sides). Markeaton Pond is shown as a long slender watercourse flowing from the eastern side of the park and into Mill Pond (a footbridge is located at the junction of the watercourses). There is an entrance and driveway across the park which leads off Ashbourne Road towards Markeaton Hall. At the entrance there is a lodge and other structures within a small triangular plot next to the western side of the park entrance. Opposite the entrance and alongside Ashbourne Road is Hill Farm which is surrounded by farmland which extends to the south. The farming landscape is composed of fields that are predominantly rectangular (formed by straight and sinuous field boundaries) that are likely to be representative of planned enclosure of post-medieval date, although south of the farm there are a number of narrower fields with distinctive curving sides that could indicate an earlier, possible medieval origin. To the west of Hill Farm and along Ashbourne Road is another park entrance, but this is within a narrow cutting and which extends a short way into the park (opposite a labelled Icehouse).
- 6.8.8. There are few significant changes to the area between the 1880s and the beginning of the 20th Century and only modest changes by 1914 (e.g. development along Ashbourne Road, west of Windmill Hill Lane, including Turner's Almshouses and a recreation ground; development along Kedleston Road). The park entrance opposite Hill Farm appears to be unaltered in this period.
- 6.8.9. Major changes had occurred by 1938 with a new road, Kingsway/Queensway, sweeping around the western outskirts of Derby (within the Scheme boundary). At the same time new road junctions had been constructed where the new road crossed Ashbourne Road and Kedleston Road. Windmill Hill Lane was severed by Kingsway, and although Hill Farm is still shown, there had been a major loss of farmland to accommodate the new road. Several new terraced properties are shown or planned along Windmill Hill Lane and along Queensway (north of Ashbourne Road and within the Scheme footprint). South of Windmill Hill Lane new housing estates are shown along Kingsway (either side of the road).

- 6.8.10. The new road severed Markeaton Park (sliced off the south-eastern extents) and the entrance to the park was re-shaped (opposite Hill Farm). At this time the lodge is labelled and the driveway appears to be unaltered.
- 6.8.11. In the 1940s and early 1950s new roundabouts on the A38 were constructed at the junction with Ashbourne Road and also at Kedleston Road. At Ashbourne Road it resulted in major changes to the park entrance which was moved further into the park. A short new drive was constructed from a new access slip road arrangement that appears to have included an ornamental flower bed. The new drive converged with the original driveway within the park. Close to the original entrance a new electricity sub-station is shown for the first time which occupies the western side of the triangular property boundary surrounding the lodge. By the late 1940s the park had become a municipal park and a miniature golf course is labelled occupying the north-west extent of it. A series of new structures and buildings are shown in the central area of the park, including at least three buildings close to the new entrance, including a new toilet block that is labelled. Beyond the park Hill Farm is no longer shown and it is likely that it had been demolished to make way for the new junction. Markeaton Pond was widened (now labelled Markeaton Lake). The terraces of houses that had been shown in the late 1930s along Queensway, close to the junction with Ashbourne Road, were replaced by a series of detached properties. Additional residential development had taken place at Mackworth, to the south. Along Windmill Hill Lane a drill hall is labelled, perhaps relating to the military activity at Markeaton Park during the war.
- 6.8.12. In the late 1960s/early 1970s Markeaton junction had acquired its current urban character. The park entrance was re-configured to accommodate a larger roundabout (also resulted in the loss of the ornamental planting bed at the entrance), and Queensway was moved slightly to the west which further impacted the edge of the park. At the park entrance the toilet block was replaced by a new structure next to the entrance. Some of the buildings erected in the 1940s/early 1950s are no longer shown in the middle of the park where a car park is labelled. Residential and commercial development had infilled the area between Kingsway and Ashbourne Road, and in the area off Ashbourne Road (towards Markeaton Lane). Part of the playing fields along Ashbourne Road was occupied by the Royal School for the Deaf. Sturgess School is shown north of Mill Pond (demolished by the early 1990s).
- 6.8.13. In the early 1990s a new driveway is shown into Markeaton Park off the Ashbourne Road and to the west of the electricity sub-station. The lodge is labelled 'Lodge Markeaton Park'. Major changes occurred at the junction of Queensway and Kedleston Road where an overbridge arrangement replaced the earlier roundabout and a new spiral footbridge was built to connect the park with the eastern side of Queensway. The park lodge is shown on Ordnance Survey maps (1:10,000) up to 2006, but it is not depicted on the 2014 map (1:10,000) (although the label still appears).
- 6.8.14. Most recently, through Heritage Lottery Funding, decorative gates (A155) were reinstated at the historic entrance off A38/A52 Ashbourne Road. The gates are decorative metal with touches of gilding between two stone pillars and attached railings. This was an action as part of the Markeaton Park Management and Maintenance Plan 2012 – 2022 (Morgan and Cowie, 2012).

Little Eaton junction

- 6.8.15. At the end of the 19th Century the Ordnance Survey maps show Alfreton Road, section 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 (a towing path is 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.
- 6.8.16. 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/trackways are shown leading from Breadsall to the west, crossing farmland. One path crosses Derby Canal on a footbridge, next to a weir that is labelled at the same location. 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 (the track continues to the west beyond the crossing). There appears to be a boundary (wall?) 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 historic filter tunnels located along each side of the river which are no longer used for potable water abstraction (Severn Trent Water (STW), pers. comm. 2016, 2018). These tunnels were installed in the 1850s and extended in 1890 and 1903 and were used for drinking water supply (refer to Chapter 13: Road Drainage and the Water Environment). 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.
- 6.8.17. 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) shows 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.
- 6.8.18. By 1938 Derby Canal appears to be 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.

- 6.8.19. 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 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 'Fourways' is shown between the 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.
- 6.8.20. 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.
- 6.8.21. 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 former channel of the River Derwent.

6.9. Cultural heritage baseline

- 6.9.1. The baseline assessment draws from a variety of sources (refer to para. 6.3.5), and provides the context in which the fieldwork was undertaken to inform this cultural heritage chapter.
- 6.9.2. The sections below consider the baseline conditions across the defined study areas, whilst Section 6.10 specifically considers historic buildings, and Section 6.11 the historic landscape.
- 6.9.3. A list of heritage assets that are present within the study area (Kingsway junction, Markeaton junction and Little Eaton junction) is presented in Appendix 6.2 [TR010022/APP/6.3] and shown on Figures 6.1 to 6.6 [TR010022/APP/6.2] (including the following statutorily protected and other designated assets). Assets have been numbered consecutively starting at A1; historic landscape character types are identified by their unique identification numbers used by DCC historic landscape characterisation project (Barnatt et al. 2000) (refer to Figures 6.8 and 6.9 [TR010022/APP/6.2]).

- 6.9.4. Not all heritage assets as detailed in Appendix 6.2 [TR010022/APP/6.3] are discussed in the following paragraphs. Details are provided in the text only where considered relevant.
- 6.9.5. Below is a list of historic building assets that have been considered as part of this assessment (refer to Figures 6.1 to 6.6 [TR010022/APP/6.2]).
- Twenty-six buildings that are grade II and grade II* listed at Kingsway and Markeaton junctions, namely: 161 Ashbourne Road (A30), 193 and 195 Ashbourne Road (A31), Conservatory in Markeaton Park (A32), 126 Nuns Street, Derby (A165), Church of St Anne, Whitecross Street, Derby (A166), Ashgate Junior School, Front Block, Dining Hall and Boundary Wall, Ashbourne Road, Derby (A167), 2 Ashbourne Road, 11-13, Brick Street (A168), 24 and 26 Ashbourne Road, Derby (A169), The Cedars, 35 Ashbourne Road, Derby (A170), 28 Ashbourne Road, Derby (A171), Railings to north of Railway Orphanage, Ashbourne Road, Derby (A172), Chestnut House, Friar Gate, Derby (A173), 67-67a Friar Gate, Derby (A174), 1-2 Vernon Street, Derby (A175), Georgian House, 66-66a Friar Gate, Derby (A176), 32 Ashbourne Road, Derby (A177), 30 Ashbourne Road, Derby (A178), The Georgian House Hotel, 34 and 36 Ashbourne Road, Derby (A179), 4 and 4a Ashbourne Road, Derby (A180), 38 Ashbourne Road, Derby (A181), Headless Cross, Arboretum, Derby (A182), The Farm, Markeaton Lane, Markeaton, Derby (A184), Former Toll House, Kedleston Road, Derby (A185), Eborn House, Broadway, Derby (A186), Home Farmhouse, Markeaton Lane (A187), and The Green, Markeaton Lane, Markeaton, Derby (A188).
 - Nine listed buildings at Little Eaton junction that are grade I, grade II* or grade II listed, namely 23, Rectory Lane (A35), Rose Cottage, Shamrock Cottage (A36), and Breadsall Manor (A37), Ivy Cottage, 19 Brookside Road, Breadsall (A160), The Old Hall, Moor Road, Breadsall (A161), Queens Head Inn and attached Coach House, Alfreton Road, Little Eaton (A162), Church of All Saints, Church Lane, Breadsall (A163), Clock House, Duffield Road, Little Eaton (A164), and Church of St Matthew, Church Lane, Darley Abbey, Derby (A183).
 - Twenty-four locally listed buildings that are on the City of Derby Local List, and apart from (A103) all are located in the Kingsway and Markeaton junctions study area, namely: Manchester Road Maltings, Ashbourne Road, Derby (A26), Wagon & Horses Public House, No. 149 Ashbourne Road, Derby (A27), Gates and railings to former church, Ashbourne Road, Derby (A28), Former home for Penitent Females, Bass Street, Derby (A29), St Barnabas Church, Radbourne Street, Derby (A44), Cast iron sign, 191 Ashbourne Road, Derby (A45), Former malthouse, brewery and vinegar works, Sherwin Street/Kedleston Road (A46), Markeaton Primary School, Bromley Street, Derby (A47), Kingsway Hospital Nurses Home, Uttoxeter Road, Derby (A53), Cast iron pillar box, Brackensdale Avenue, Mackworth, Derby (A54), Britannia Mills, Markeaton Street/Mackworth Street, Derby (A55), Horse trough, Kedleston Road, Derby (A79), Old Vicarage School, Darley Abbey, Derby (A103), Baptist Chapel, Broadway, Derby (A127), Duredent House, 93 Kedleston Road, Derby (A128), Rear of No. 29 Church Lane, Darley Abbey (A134), Rough Heanor Farm, No. 274 Uttoxeter Road,

Derby (A135), Victoria Hotel, Cowley Street, Derby (A148), Durdant Gardens, No. 97-115 (odd) Kedleston Road, Derby (A149), Cast iron sign, Brick Street, Derby (A150), Parish Boundary Post, outside No. 23 Church Lane, Derby (A151), Parish Boundary Marker, Duffield Road/Ferrers Way, Derby (A152), Milepost, Duffield Road, Allestree, Derby (A153), and Nun's Bridge, Nun's Street, Derby (A158).

- Three locally listed buildings on EBC Local List (all located at Little Eaton junction), namely: farm building at 1 Brooks Hollow, Little Eaton (A86), War memorial, All Saints Churchyard, Moor Road, Breadsall (A96), and Breadsall Church of England Primary School, Moor Road, Breadsall (A112).

6.9.6. There are seven conservation areas within the study area which contain a number of historic buildings (refer to Figures 6.1 to 6.6 [TR010022/APP/6.2]):

- *Breadsall Conservation Area (A61)*: The Old Hall Moor Road Breadsall (A161) and the Church of All Saints Church Lane Breadsall (A163).
- *Friar Gate Conservation Area (A62)*: 5 Uttoxeter Old Road Derby (A123), Cast iron sign Brick Street Derby (A150), Nun's Bridge Nun's Street Derby (A158), 126 Nuns Street Derby (A165), Ashgate Junior School Front Block Dining Hall and Boundary Wall (A40), Ashbourne Road Derby (A167), 2 Ashbourne Road 11-13, Brick Street (A168), 24 and 26 Ashbourne Road Derby (A169), The Cedars 35 Ashbourne Road Derby (A170), 28 Ashbourne Road Derby (A171), Railings to north of Railway Orphanage Ashbourne Road Derby (A172), Chestnut House Friar Gate Derby (A173), 67-67a Friar Gate Derby (A174), 1-2 Vernon Street Derby (A175), Georgian House 66-66a Friar Gate Derby (A176), 32 Ashbourne Road Derby (A177), 30 Ashbourne Road Derby (A178), The Georgian House Hotel 34 and 36 Ashbourne Road Derby (A179), 4 and 4a Ashbourne Road Derby (A180), 38 Ashbourne Road Derby (A181), Headless Cross Arboretum Derby (A182), and 44 Ashbourne Road (A191).
- *Leylands Estate Conservation Area (A63)*: Eborn House Broadway Derby (A186).
- *Little Eaton Conservation Area (A64)*: Bridge and crossing gates The Town Little Eaton (A119), and Queens Head Inn and attached Coach House Alfreton Road Little Eaton (A162).
- *Markeaton Conservation Area (A65)*: The Farm Markeaton Lane Markeaton Derby (A184), Home Farmhouse Markeaton Lane (A187), and The Green Markeaton Lane Markeaton Derby (A188).
- *Allestree Conservation Area (A66)*: Church of St Edmund's (A210), and Pillar St Edmund's Churchyard Allestree Derby (A72).
- *Darley Abbey Conservation Area (A67)*: Church of St Matthew Church Lane Darley Abbey, Derby (A183).

- 6.9.7. The following designated assets of high value, identified in accordance with Table 6.2 (listed buildings that are grade I or II*, and scheduled monuments), are also located outside of the study area but within 1km of the Scheme boundary and have also been considered in this assessment (majority of these are also within a conservation area) (see Appendix 6.2 [TR010022/APP/6.3] for details and refer to Figures 6.1 to 6.3 and 6.5 to 6.6 [TR010022/APP/6.2]):
- Three buildings that are grade I listed: St Helens House including attached former school buildings and front wall (A197), 41 Friar Gate (A199) (both located at Kingsway/Markeaton junction), and Darley Abbey Mills (South Complex) Long Mill, Middle Mill, East Mill, West Mill, engine house and chimney, tollhouse, bobbin shop and drying shed (A198), located at Little Eaton junction.
 - Fifteen buildings that are grade II* listed: seven at Little Eaton junction, 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 and cart sheds to north of site (A201), Allestree Hall (A202), Church of St Edmund (A210), Darley Abbey Old Abbey Building (A212), 3-16 Brick Row (A213), and 1 and 2 Brick Row (A214); and eight at Kingsway/Markeaton junction, Church of St John the Evangelist (A203), Rykneld Mill (A204), 27 Friar Gate (A205), 42 Friar Gate (A206), 43-44 Friar Gate (A207), 99 Friar Gate (A208), Friary Hotel (A209), and 47-51, Friar Gate (A211).
 - One scheduled monument (also a grade II* listed building): Darley Abbey Old Abbey Building (remains of) (A212), located at Little Eaton junction.
- 6.9.8. Following consultation with consultees, Kedleston Hall (refer to Figure 6.4 [TR010022/APP/6.2]), Kedleston Registered Park and Garden (refer to Figure 6.4), Breadsall Priory (refer to Figure 6.6 [TR010022/APP/6.2]), and Allestree Park (refer to Figure 6.5 [TR010022/APP/6.2]) have been included within the baseline and assessment (see Section 6.15).

Prehistoric period

- 6.9.9. Within the study area there is a paucity of evidence for occupation or settlement dating to the prehistoric period. However, the presence of isolated findspots of prehistoric material within these areas suggests a low level of activity during this period. Finds of this period include a flint knife from Allestree (A1), polished axe heads within the Kingsway and Markeaton junctions study area (A2, A3), and a barbed and tanged arrowhead from Darley Abbey (A73). An undated possible ring ditch detected by aerial photography that lies to the south of Little Eaton junction could also be associated with prehistoric activity (A59). A topographic feature known as Peg Low (A60) located to the north-east of Little Eaton junction appears to be a natural feature, although prior to an investigation carried out in the late 1930s, it was considered to be a possible prehistoric burial mound.
- 6.9.10. The floodplain of Markeaton Brook/Markeaton Lake, and Bramble Brook, and the floodplain of the River Derwent (including its tributaries and former channels that cross the Little Eaton junction study area), may contain buried archaeological remains of prehistoric and later date, including palaeo-environmental deposits of archaeological interest (A4).

Roman period

- 6.9.11. The Roman road from Little Chester to Rocester (A5) may have passed through Mackworth Park, although its alignment is conjectured as far as Mackworth. A section of Rykniel Street (Margary Roman road 18c to d) (A81) follows the alignment of Moor Road as it enters Breadsall. It linked the Foss Way to Roman settlements in the Midlands, including Little Chester on the northern edge of Derby. West of the River Derwent there is a postulated route of another Roman road that ran between Buxton and Derby (A84). Further south elements of the road are visible as earthworks and cropmarks on aerial photographs. The route that follows a ridgeway may have earlier Iron Age origins and is likely also to have been used in the early medieval and medieval periods.
- 6.9.12. At Little Eaton junction there is a topographic reference to a possible site of a Roman camp (Camp Wood) (A7). No evidence of the camp has been discovered and quarrying is likely to have destroyed any evidence of the camp that may have survived. To the south a findspot of a Roman coin was dug up from a garden in Derby (A6). A Roman coin was also found in the area of Mackworth Secondary Modern School in c.1972 (A78). There is a Roman carved head (A147) found on Duffield Road that is now built into a garden wall (refer to Figure 6.5 [TR010022/APP/6.2]).

Early medieval and medieval periods

- 6.9.13. Derby has its origins in the early medieval period. In AD 874 the Vikings renamed the settlement from Northworthy to Deorby. Recent archaeological evidence would suggest that the Vikings and Anglo-Saxons probably co-existed, occupying two areas of land surrounded by water. The Anglo-Saxon Chronicle states that Derby was divided by water. It infers that the land to the north of the river was known as Norþworþig meaning north enclosure, with the opposite area known as Deorby.
- 6.9.14. A North African pilgrim's flask (A74) found in Nun's Street, Derby is possibly early medieval. A fragment of a tapered stone shaft on a square base with steps (A182) that once stood at the west end of Friar Gate was probably a plague cross and is also probably of early medieval date.
- 6.9.15. West of Derby City is the suburb of Mackworth, which includes the township of Markeaton. During the medieval period Mackworth was a freehold estate held by the De Mackworth family. The manor of Mackworth is described in the Domesday Survey and was associated with Markeaton Park (since the manor was associated with Markeaton Park it is considered to lie within the study area).
- 6.9.16. In the Domesday survey Markeaton is recorded as a large village with a mill and a church. The manor of Mackworth was recorded as being in the hands of the Earl of Chester and controlled by his Steward, an ancestor of the Touchett family.
- 6.9.17. Derbyshire Historic Environment Record notes the presence of medieval features relating to its former rural farming origins, including the site of Markeaton medieval deep park (A8) and fossilised ridge and furrow (A10) from the former Markeaton medieval village in Markeaton Park. It is possible that some of the historic roads and field boundaries within the study area also have their origins in the medieval period. Markeaton Hall may have been a medieval manor house before it was re-built as a country house in the post-medieval period (A11). The

former Mackworth Mills, on Markeaton Street, may have been the location of a watermill that is noted in historic references dating to 1272 (A12).

- 6.9.18. Breadsall is recorded in various documents dating to the 11th Century. In 1002 the settlement was known as Bregdeshale and in 1004 it was referred to as Braegesheale. The Domesday Survey records the early settlement as consisting of five carucates, two ploughs, 21 villans and seven bordars having eight ploughs. The survey also refers to a priest and a church, a mill and 12 acres of meadow. Breadsall Conservation Area includes two listed buildings that are of medieval date: The Old Hall (A161) (a house of probable 14th Century date), and the Church of All Saints (A163) (parish church of 12th to 14th Century date).
- 6.9.19. Across the wider area at Little Eaton junction there are a series of medieval earthworks, including possible lynchets (A9), representing the remains of former field systems (recorded to the west of Camp Wood), and ridge and furrow cultivation earthworks of probable medieval date (A118, A136, A137, A138, A139, A142, A150, A245, A246, A248 and A249). There is a possible hollow/infilled tributary of the River Derwent (A141) next to Holme Nook Farm, Allestree that is in the floodplain of the river which is undated, but could be related to the ridge and furrow or river floodplain features. Another possible hollow way has been detected by LiDAR in a field immediately to the south of Little Eaton junction (A247).
- 6.9.20. The parish of Allestree is mentioned in the Domesday survey and is referred to as the hamlet of the manor of Markeaton which was held by the Earl of Chester. During the 12th Century most of the land was granted and sold to St Mary's Abbey at Darley. Following this it was rented back to the Touchett family. In 1516 the Manor came into the hands of John Mundy, a goldsmith.

Post-medieval and modern periods

- 6.9.21. During the Civil War of 1642 - 1646 Derby was garrisoned by Parliamentary troops commanded by Sir John Gell, who was appointed Governor of the town in 1643.
- 6.9.22. In 1717 Derby was the site of the first water powered silk mill in Britain. Numerous other mills were developed in the area including that of Darley Abbey (within the Derwent Valley Mills WHS) which was constructed in 1783.
- 6.9.23. During the 18th and 19th Centuries industrial development was fostered by the parallel development of improved communications (initially canal and associated tramways and to a lesser degree by turnpike roads), and then by the railways and the era of locomotive transportation. Derby became an early centre of the railway industry.
- 6.9.24. At the beginning of the 18th Century local roads were improved under the turnpike system, including the Derby to Brassington (via Hulland Way) turnpike road (A18), Derby to Brassington (via Quarndon parish) turnpike road (A85), the Derby to Hurdlow (via Ashbourne) turnpike road (A19), and the Derby to Sheffield (via Duffield) turnpike road (A82).

- 6.9.25. 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.
- 6.9.26. 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).
- 6.9.27. 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.
- 6.9.28. 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. In the early 20th Century, Little Eaton was a popular resort for many working people from Derby with a train trip or canal ride to local woods, quarries and tearooms being a popular Sunday and bank holiday outing.
- 6.9.29. The Little Eaton Tramway (A14) opened 1793 and consisted of a main line from the canal wharf at Little Eaton to the pits at Smithy Houses. Under the direction of Benjamin Outram, the tramway was completed in May 1795. It had a single set of lines with numerous passing places or crossings that remained in place until its closure in 1908. As traffic grew, the number of passing places was increased and by 1825 there were nine crossings in use. Over the years several additional branch lines were constructed as the coalfield was developed and also as other industries made full use of the railway. While some of these lines were private, built by the colliery owners, it appears that in the main they were worked by the canal company.
- 6.9.30. The Inclosure map of Breadsall (dated 1817) shows the Little Eaton branch of the Derby Canal before the introduction of the railway network which also identifies various local landowners. 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) (**Plate 1** - refer to Appendix 6.3 [TR010022/APP/6.3]). South of Little Eaton junction 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 (**Plate 2** - refer to Appendix 6.3 [TR010022/APP/6.3]). 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. A weir is also marked at the same location as the footbridge, but this could be connected to the adjacent drainage ditches. 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 A62 Alfreton Road) 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). The earthwork remains of a curving ditch (A296) that also lies beneath an east-west field boundary was detected by LiDAR (also recorded during topographic survey) and appears to flow into a ditch alongside the disused Derby Canal.

- 6.9.31. Breadsall village contains a number of listed buildings (cottages, farmhouses, and a rectory) and historic buildings from the 18th and 19th Centuries that are within or close to the Breadsall Conservation Area. These include 23 Rectory Lane (A35), Rose Cottage Shamrock cottage (A36), Breadsall Manor (A37), and Manor Cottage (A33). These are discussed in more detail below.
- 6.9.32. Markeaton was at one time the centre of an extensive estate with a church and large manor house. Markeaton Park (A10) was created by William Emes of Bowbridge Fields in the 1770s out of a medieval deer park (A8) and a medieval village. A 16th Century house had stood at the centre of an estate that had been acquired by John Mundy in 1516 and which continued to be held by the Mundy family into the early 20th Century. The house was replaced in the mid-18th Century by a country house (A11) (demolished in 1964). William Emes probably laid out the park at this time and it contained formal gardens, shaded walks and a lake (Markeaton Pond) created by widening Markeaton Brook. New buildings were added to the park in subsequent years. The park contained a number of buildings and structures. Features of note included a grade II listed conservatory (A32), an entrance lodge (A39) on Ashbourne Road next to the driveway into the park, and an icehouse (A23) which is shown on the 1887 1st edition Ordnance Survey map (1:10,560). It appears that the park had an extensive boundary wall (A40) along Ashbourne Road; and a long narrow pond, Markeaton Pond, (A83) to the east of the country house which connected to a mill pond and industrial works (Markeaton Mills Colour Works (A12)). There is a watercolour painting by George Bailey of the demolished park lodge and entrance on Ashbourne Road (dated 1862) (**Plate 3** - refer to Appendix 6.3 [TR010022/APP/6.3]). The same subject was also painted by S.H. Parkins in 1921 (**Plate 4** - refer to Appendix 6.3 [TR010022/APP/6.3]).

- 6.9.33. The boundary wall (A40) possibly dates from the mid-18th Century, it is constructed of squared coursed tooled limestone with segmental coping stones. It is a long linear feature of Ashbourne Road (**Plate 5** - refer to Appendix 6.3 [TR010022/APP/6.3]). A large part of the wall appears to be little altered from the original alignment, although sections have been removed to accommodate Markeaton junction. The boundary wall has also been altered around the entrance and appears to have been reconfigured and rebuilt on a different alignment to create a recessed exit during the 20th Century alteration to Ashbourne Road to accommodate Queensway and subsequent road improvements. This is confirmed in the fabric of the wall as engineering bricks are evident at the base of the wall around the southern entrance to the park and the wall is bonded with cement mortar and ribbon pointed (**Plate 6** - refer to Appendix 6.3 [TR010022/APP/6.3]). The Bailey and Parkins paintings also shows the demolished entrance lodge which was located close to the original entrance. The demolished entrance lodge appears to have been of two storeys under a pitched slate roof with projecting bay to the south with stone water tabling, kneelers and finials under a slate roof with central octagonal chimney. It has two bays with stone mullions and hood moulding, possibly with leaded lights.
- 6.9.34. Markeaton Hall was the home of poet Francis Noel Clarke Mundy (born 1739, died 1815) part of the Lichfield circle (Biggsby, 1854).
- 6.9.35. During the 20th Century the south and eastern side of Markeaton Park underwent substantial change as a result of road improvement schemes, the encroachment of the city limits and new owners. In 1929/1930 the house and gardens were gifted to the city of Derby (during the late 20th Century, it purchased a further 211 acres of land to facilitate the expansion of the public park). An 18 hole pitch and putting course and tennis courts were laid out in the park (the golf course covered fossilised ridge and furrow earthworks), and fishing and boating were introduced on Markeaton Pond which was dredged and enlarged (opened by HRH Prince of Wales in 1934).
- 6.9.36. In the late 1930s Queensway was constructed and crossed the eastern side of the park with new junctions introduced at Ashbourne Road and Kedleston Road. In the 1940s and early 1950s various changes appear to have impacted the original park entrance and a number of its associated features:
- Park entrance re-configured (moved further into the park) which probably affected the alignment of the boundary wall (A40) at its location next to the park entrance.
 - New drive was constructed from a new access slip road arrangement that appears to have included an ornamental flower bed arrangement, the new drive converged with the original driveway in the park.
 - New electricity sub-station was built next to the entrance lodge (A39).
- 6.9.37. In the 1960s and early 1970s the park entrance appears to have changed again to accommodate a new enlarged roundabout at Markeaton junction and a slight realignment of the southern end of Queensway. A new toilet block was built close to the entrance. Once more it is likely that the changes affected the alignment of the park boundary wall which may have been moved. To the east of Queensway, the Royal School for the Deaf was built on part of the playing fields and it is

possible that this would also have resulted in the loss of some of the boundary wall at the school entrance.

- 6.9.38. In the early 1990s a new driveway into the park had been constructed along Ashbourne Road, but to the west of the original driveway, and a new A38 interchange had been built at the junction of Queensway and Kedleston Road. The park entrance lodge (A39) is shown on modern Ordnance Survey maps (2006, 1:10,000) but it has since been demolished (possibly by 2014, although it is still labelled on the 1:10,000 map).
- 6.9.39. During World War II, and possibly as early as May 1940, Markeaton Park was turned into an army military base (A58). Wooden barrack blocks and a parade ground were built in the southern part of the park, and the country house was requisitioned. New roads were constructed in this part of the park to link the various buildings and facilities and it is likely that the new entrance at Ashbourne Road was a response to the increased military traffic. The 14th Battalion of the Sherwood Foresters were based at the park up to 1942, and the Home Guard trained in the park for a period of the war. In the post-war period after the barracks were vacated they were used as temporary housing for families whose homes had been seriously damaged or destroyed in bombing raids. During the post-war period many structures were removed out of the park or demolished, but the parade ground became the council car park and other buildings were used for civilian purposes, including a depot and train shed (World War II army cookhouse that had ovens outside of the building) for a former model railway line that ran through part of the post-war parkland.
- 6.9.40. Markeaton Park's (A10) significance lies in the historic interest as a landscape that has evolved from being a medieval deer park and medieval village, through to being the centre of a 16th Century estate which evolved into an 18th Century estate complete with a designed parkland and associated features. Its later use during World War II as a military base adds to the historic interest as does its later use as a municipal park.
- 6.9.41. The architectural interest of the park relates to the designed elements that remain, particularly those relating to the 18th Century endeavours by William Emes such as extant 18th Century buildings and elements of the landscape, including trees. However, the loss of the south-east lodge in 1935 followed by the use of the parkland as a military base during World War II and then the subsequent demolition of the principal house in 1964, have heralded a number of alterations to the park that has diminished its architectural interest. Later road improvements that have led to incremental loss of land and the clear municipal interventions, such as the toilet block at the southern entrance, detract from the historic and architectural interest of the park.
- 6.9.42. Its setting on the cusp of farmland and agricultural land to the north-west of land that would have been historically associated with the estate contributes to the significance of the park. The rest of the park to the north, east and south and south-west is surrounded by modern development, most notably the busy road network. This does not contribute to the significance of the park and detracts from its significance.

- 6.9.43. A short distance opposite Markeaton Park, occupying land between Kingsway and Windmill Hill Lane, is the Kingsway Army Reserve Centre (A189). The building is of two storeys with 13 bays constructed of brick with stone detailing and enrichments under a flat roof with brick parapet. The central seventh bay is the principal entrance with stone central pediment flanked by giant two storey pilasters. This building that has a date stone of 1939 over the pedestrian entrance from Kingsway (**Plate 7** - refer to Appendix 6.3 [TR010022/APP/6.3]) is contemporary with the army base at Markeaton Park, and is in its original configuration as shown on aerial photographs (July 1945). It appears to consist of a Drill Hall, auxiliary area, including extensive garages/storage facilities and two rows of military buildings linked by paths with field(s) to the north-east (footprint appears to have changed little since the 1940s).
- 6.9.44. The 18th and 19th Centuries saw the birth and development of the industrial factory system, when new types of buildings were built to accommodate new technologies, and new methods of working were introduced to stream-line manufacturing. At the same time factory owners pioneered the provision of improved housing and working conditions for their employees. The Derwent Valley Mills WHS (A41) which crosses the Scheme at Little Eaton junction was inscribed in 2001 as representing an industrial landscape of historical and technological interest. It covers a 15 mile stretch of the Lower Derwent Valley and incorporates the historic textile areas of Cromford, Belper, Milford, Darley Abbey and Derby.
- 6.9.45. Industrial expansion continued into the 19th Century. At this time Derby was emerging as an engineering centre, partly influenced by the establishment of the North Midland Railway Company in 1840. This was merged with the Midland Counties Railway and the Birmingham and Derby Junction Railway Company to form the Midland Railway Company. A number of historic railways cross the study area, including the North Midland Railway (A15) at Little Eaton, and the Derbyshire and North Staffordshire Extension line, Great Northern Railway (A16). In 1878 Breadsall had its own railway station (A17).
- 6.9.46. During the mid- to late 19th Century Derby expanded to take in outlying villages, including those situated within the study area. Surviving elements of this expansion include the grade II listed buildings at 161 Ashbourne Road (A30) and 193 - 195 Ashbourne Road (A31), and the locally listed Wagon and Horses Public House at 149 Ashbourne Road (A27).
- 6.9.47. Local industries, including the brewing industry expanded to increased demand from an expanded population. Manchester Brewery, Ashbourne Road was established in 1848 (now demolished) (A25). A small two-storey brewhouse (A24) which served the Gallant Hussar pubic house was built on Noel Street in the late 1860s (now demolished). A former malthouse, brewery and vinegar works on Sherwin Street/Kedleston Road (A46) was built in the late 1870s (now a residential home). Manchester Road Maltings (A26) was a former malthouse that was associated with the nearby Manchester Brewery.
- 6.9.48. At Kingsway, Thornhill Park (A48) and Thornhill villa (A49), that date to c.1821, became the core of medical facilities that developed alongside Uttoxeter Road during the later 19th and 20th Centuries, including the Borough Lunatic Asylum (A50) and Kingsway Hospital Nurses Home (A53).

- 6.9.49. During World War II the Luftwaffe targeted the industrial premises to the south and south-east of the city of Derby, including the Rolls Royce factory that produced engines for Spitfires, Hurricanes and Avro Lancaster bombers. Bombing raids were carried out from 1940 to 1942, and the city was defended by a series of gun emplacements, barrage balloons and decoy sites. The remains are represented by various assets recorded within the study areas, including the site of a World War II heavy anti-aircraft battery (A56) that is located along Kingsway (south of Markeaton Park) and an anti-tank spigot mortar emplacement (A57) just north of Kingsway junction. An earlier World War I heavy anti-aircraft battery was also sited at Derby Union Workhouse (A196).
- 6.9.50. In the 20th Century the further expansion of Derby followed the Local Government Boundary Commission recommendations (1968) when the town boundary was modified to take in large parts of the rural district. Heritage assets that date to the 20th Century include a cast iron pillar box on Brackensdale Avenue (A54) that is on the City of Derby Local List; Britannia Mills, a hosiery mill that was built in 1912 on the site of an earlier mill (A55); and Markeaton Primary School, Bromley Street (A47).

6.10. Historic buildings

Listed buildings and Conservation Areas

- 6.10.1. There are thirty-five listed buildings within the study area (see Figures 6.1 to 6.6 [TR010022/APP/6.2]), these are all grade II listed apart from The Old Hall, Moor Road, Breadsall (A161) and Church of St Anne, Whitecross Street, Derby (A166) that are grade II*; and the Church of All Saints, Church Lane, Breadsall (A163) that is grade I.
- 6.10.2. Details of these buildings are provided below, including Kedleston Hall and its associated listed buildings, and the designed landscape which is integral to the Hall.
- 6.10.3. There are seven conservation areas within the study area, namely Breadsall Conservation Area (A61), Friar Gate Conservation Area (A62), Leylands Estate Conservation Area (A63), Little Eaton Conservation Area (A64), Markeaton Conservation Area (A65), Allestree Conservation Area (A66), and Darley Abbey Conservation Area (A67) (see Figures 6.1 to 6.5 [TR010022/APP/6.2]). Details of these conservation areas are provided below.

Kingsway and Markeaton junctions

- 6.10.4. The Conservatory in Markeaton Park (A32) dates from the late 18th Century. It may have been designed by Joseph Pickford of Derby for the Mundy family. It is constructed of brick with ashlar dressings under a plain tile roof. It is single storey with nine bays. The central pavilion has a large round headed opening with double glazed doors, with moulded ashlar arch, impost blocks, and keystone above a moulded ashlar pediment. Either side are lower three bay wings, each with three round headed openings with moulded ashlar arches. The significance of this building lies in its historic association with the now demolished Markeaton Hall, the architectural interest lies in its distinctive design that reflects the fashions of the time. It was built as an adjunct to Markeaton Hall which was demolished in 1964. It is located at the centre of the Markeaton Park and forms an impressive focal point to the designed landscape.

Markeaton Conservation Area (A65)

- 6.10.5. Markeaton Conservation Area (A65) is located approximately 680m from the existing Markeaton junction. Markeaton village was designated a conservation area (A65) in 1975 to protect the setting of a small cluster of red brick estate buildings that date from the 18th Century, that include Home Farm House (A187), The Green (A188) and the Farm (A184). The boundary is tightly drawn around the estate village to the north of the park and does not include the park or any other buildings within the park. The listed buildings are interrelated to one another and illustrate a different aspect of the functioning estate. They were designed to both be aesthetically pleasing as well as functional. This is a large part of their architectural and historic interest. Collectively with the lodge and the walls of Markeaton Park walled garden visible, they make an attractive collection of red brick buildings, set around the northern entrance to Markeaton Park. The conservation area and the buildings are located on the cusp of farmland and the designed landscape of Markeaton Park. This is an important aspect of their setting and it contributes to their significance.

Friar Gate Conservation Area (A62)

- 6.10.6. Friar Gate Conservation Area (A62) is located approximately 500m from the eastern boundary of the existing Markeaton junction along Ashbourne Road. Ashbourne Road was created as a turnpike road in the 18th Century including notable 18th and 19th Century buildings, many of which are listed or included on the City of Derby Local List. The conservation area captures the historic roadside development that sprang up alongside the ancient western exits from Derby City Centre to Ashbourne Road. Friar Gate is a wide thoroughfare of medieval origins and contains many high quality buildings from the 17th, 18th and 19th Centuries. It is particularly notable for its Georgian town houses. The conservation area is within a wholly urban location to the west of Derby City Centre and has a generally linear form of development along Friar Gate and Ashbourne Road with buildings facing, and opening directly onto the pavement. Ashbourne Road primarily developed in the 19th Century as industrialisation extended the city's boundaries, as a result Ashbourne Road is less architectural cohesive and less dense than Friar Gate with a mixture of building heights, types and plot layouts. Two pre-1850 buildings of note are grade II listed: no. 35 Ashbourne Road (A170) is a large mid-18th Century red brick house once approached by a drive, and the Georgian House Hotel (A176) which is an early 19th Century building that is contemporary with Vernon Street. The linear and densely built up nature of the conservation area means the setting of the buildings and their significance is defined by its location on a primary historic transportation route into and out of Derby City Centre. The further west, towards Markeaton junction, from the centre shows the gradual development of the east to west route from the 17th Century Friar Gate to the 19th Century Ashbourne Road.
- 6.10.7. Other notable buildings along the route and closest to Markeaton junction are the grade II listed 161 Ashbourne Road (A30) which is an early 19th Century former toll house. It is constructed of stone under a slate roof of two storeys and two bays with a splayed front with one ground storey window on splay at each side. It has a centrally placed plain door set under a large segmental recess. The significance of this heritage asset lies in its architectural and historic interest as a former toll house and the distinctive architecture of its splayed front. Its

significance is contributed to by its continued presence on one of the main routes into Derby. Its former function as a toll house means that its roadside setting is intrinsic to the significance of the building.

- 6.10.8. 193 and 195 Ashbourne Road (A31) are a pair of modest cottages dating from the early 19th Century. They are constructed of red brick under a slate roof of three storeys and two bays. They are positioned on the edge of the principle road into Derby. The significance of this asset is their architectural and historic interest as a domestic property of the early 19th Century. They are set back behind a fence and privet hedge which provides a little visual relief from the hard environment of the main road.

Leylands Estate Conservation Area (A63)

- 6.10.9. Leylands Estate Conservation Area (A63), designated in 1994, is located approximately 500m from the Scheme boundary at Markeaton junction. The focal point of the estate is Eborn House, formerly Leylands House (A186), itself an elegant Georgian mansion of about 1820 which is a grade II listed building. The conservation area is a post-war housing estate complete with nursing home, meeting hall and private chapel for retired members of retail clothing and associated trades. It was initially set up by Thomas Helps, a small artisan retailer and his associates in London in 1832 who established The Linen and Woollen Drapers, Silk Mercers, Lacemen, Haberdashers and Hosiers Institution.
- 6.10.10. The Leylands Estate was built after World War II and they built the estate in the early 1950s to designs by the architect T P Bennett of London. A further eight semi-detached dwellings were added by the same architect in 1960. The style of the housing is simple, constructed of buff brick with tiled roofs. Its setting is defined by its private and enclosed grounds which features Eborn House as the focal point of the post war development. It is bounded by a mature tree belt around the perimeter which defines and encloses the conservation area. The significance of the Leylands Estate lies in its historic interest as an innovative housing estate established by a philanthropic organisation for the welfare of its retired members. The architectural interest lies in the layout of the estate. The setting of Eborn House has been completely altered since its initial inception as a country house surrounded by open countryside. The setting of the building does not contribute to its earlier incarnation as a country house but does contribute to its later use as a part of the Leylands Estate.

Little Eaton junction

- 6.10.11. 23 Rectory Lane, Breadsall (A35) is a cottage believed to date from the early 17th Century. It is timber-framed, although it has been encased in a 20th Century cement render. The building has a steeply pitched roof with modern tiles and is of a single storey with an attic. It lies on the western side of Rectory Lane and its significance lies in its archaeological and architectural interest, due to its 17th Century origins, its timber-framed vernacular construction and the accumulation of layers of alterations and changes over the centuries since. Although outside of Breadsall Conservation Area, 23 Rectory Lane makes a positive contribution to it and enhances the street scene. Its setting is defined by its position and relationship to other buildings within the streetscape.

- 6.10.12. Rose Cottage Shamrock Cottage (A36) was formerly a farmhouse and is now two cottages dating from the early 17th Century. They are of timber-framed construction with painted brick noggin under a plain tile roof and are of two storeys, with box framing exposed on all sides and diagonal braces to some of the upper panels and a middle rail. The former farmhouse has a picturesque and romantic quality with dormer windows and climbing plants around the doorways. Its significance lies in its archaeological and architectural interest due to its 17th Century origins, its timber-framed vernacular construction and the accumulation of layers of alterations and changes over the centuries since, and the aesthetics of an almost chocolate box country cottage. It sits at right angles to Brookside Lane and the enclosed and narrow nature of the road, with the proximity of the brook, creates a village and streetscape setting within which the cottages are experienced and appreciated.
- 6.10.13. 1, Pall Mall (A280) is a grade II listed cottage built 1711, extended to west in 1735, extended to west again in late 18th Century. It is constructed of red brick under a tile roof of two storeys. Its significance lies in its early construction date and its architectural interest. Its setting within the village of Breadsall contributes to its significance.
- 6.10.14. Methodist Chapel (A279) is a grade II listed chapel, dated 1826. It is constructed of rendered brick with Welsh slate roof. North elevation is of two bays with a central early 20th Century porch with pitched roof. It is flanked on each side by semi-circular headed windows with early 20th Century glazing bars and 'Art Nouveau' coloured glass. Above the stringcourse is a date plaque inscribed 'Wesleyan Methodist Chapel MDCCCXXVI'. Situated on Brookside Road to the south east of Breadsall. Its location within the village demonstrates the place that Methodism had in the religious teachers within Breadsall.

Breadsall Conservation Area (A61)

- 6.10.15. Breadsall Conservation Area (A61) is located approximately 500m from the existing Little Eaton junction. Breadsall is a rural village despite being only three miles north-east of Derby. It dates back to Saxon times. Until 1925, it was predominately owned by the Harpur Family. The family had owned the estate since the 17th Century but had to sell a large part of it in 1925 to pay death duties. The village expanded from a small number of farms, smallholdings and church that originally formed the core of the village. In 1878 the Great Northern Railway opened a station at Breadsall on the Nottingham to Derby line. Breadsall Station closed in 1953 and the line was out of use by 1964. However, the introduction of the railways changed the character of the village; it encouraged new development along Station Road and Brookside Road in the early part of the 20th Century. Ribbon development influenced by the old street pattern has influenced the continued development of the village as it expanded along these routes. This, coupled with infilling has created an almost continuous frontage of buildings within the village. This 20th Century development has diluted the original agricultural character of the village. However, the village is still set within an arable landscape with outlying farms and dwellings and so the setting is retained.

6.10.16. The boundary of the conservation area does not cover the entire village, rather it is focused on the open land around the Church of All Saints (A163), The Old Hall (A161), the school (A112); open land to the north of these buildings; and land around Boosemoor Brook, including Brookside Farm and Rectory Farm Cottage (the historic parts of the village with detached farm steadings). The conservation area is, therefore, made up of a combination of clusters of properties that have different characters rather than a cohesive whole. The area around the Church and The Old Hall form an important part of the conservation area, perhaps the oldest and least altered part of the village.

Church of All Saints (A163)

6.10.17. Church of All Saints (A163) is a grade I listed building. It dates from the 12th Century with alterations and additions in the 13th and 14th Centuries, and was restored by W D Caroe following a fire in 1915. It is constructed of coursed squared gritstone with gritstone dressings with a west steeple reported to be one of the tallest spires in Derbyshire. This, in combination with it being built on the highest point of the village, makes it a prominent feature within the wider landscape. The churchyard is located to the north, east and south of the church and is bounded by a coursed gritstone wall to the north immediately fronting Moor Road. Mature trees pepper the boundary and surrounding properties restricting views from the church, however, the spire is visible in long range views towards the church. Its significance lies in its architectural and historic interest. The height of the spire means that it was designed to be conspicuous, with views towards the church therefore contributing to its significance as a rural parish church.

The Old Hall (A161)

6.10.18. The Old Hall (A161), opposite the church, was originally built as a Tudor Manor house. Since it was built it has undergone restoration in the 20th Century and has had a variety of uses including rectory and shop. It is now a private dwelling. It has architectural and historic interest as a vernacular building with 14th Century origins. The Old Hall and the church form an important grouping and a focal point for the village. The topography and the combination of open fields and church yard allow this part of the conservation area to enjoy a sense of space, whilst being discrete and enclosed behind trees and boundary walls. Here there are some glimpsed views through trees and houses to the north afforded by the elevated topography, but essentially this part is enclosed and views out are incidental to the experience rather than an essential component. Other parts of the conservation area around Brookmoor Brook are characterised by the attractive vernacular cottages that are enhanced by their setting next to the brook. Their setting is enhanced by the grassy track that completes a rural scene.

6.10.19. Rectory Lane and Moor Road are essentially formed around the linear route through the village. Here the setting is linked to the street scene and the combination of building types, materials and textures and enhanced by the small village grassed triangles. Whilst there may be views out, again these are incidental as the conservation area is essential experienced in a rural village setting, although with the later additions of a busy road network located nearby. This is audible from within the conservation area, although there are few areas within the conservation area where this is visible. The buildings within the

conservation area are orientated inwards towards each other and adjacent to the village streets.

- 6.10.20. Whilst not within the boundary of the conservation area, there are many other buildings that illustrate the development of Breadsall such as grade II listed buildings: 23 Rectory Lane (A35), Rose Cottage and Shamrock Cottage (A36) and Ivy Cottage (A160) that illustrate the vernacular of early 17th Century timber construction. The significance of these buildings lies in their historic interest as vernacular buildings of an early date. They add architectural interest to Breadsall.

Breadsall Manor (A37)

- 6.10.21. Breadsall Manor (A37) is located less than 500m from the existing Little Eaton junction. It is an early 19th Century house constructed in red brick and stuccoed under a hipped Welsh slate roof with heavy plain eaves. It is of two storeys with a decorative guilloche stringcourse. The west elevation has three broad bays, the centre bay has a shallow bow. The southern elevation, the principal frontage, has a narrow receded centre bay, which has a doorway with panelled door and rectangular overlight and a Trafalgar porch made of cast iron with decorative iron work. It was believed to have been built during the Regency period prior to the Oxford Movement c.1833 which favoured gothic detailing inside and out. Breadsall Manor, unlike its predecessor which stood close to the church, took the opportunity to build on a private site detached from the church to the north of the village in open countryside. It is a generous detached house in grounds with a small country house feel. Breadsall Manor is approached from Rectory Lane through stone ashlar gate posts and flanking walls. The significance of this asset lies in its architectural and historic interest as a former rectory and then manor house. The house is not immediately visible as it sits in a wooded enclave. The rural aspects of its setting contribute towards its significance.

Breadsall Priory (A242) and Stables (A243)

- 6.10.22. Breadsall Priory (A242) and Stables (A243) lie one mile north of the village off a long driveway from Moor Road. It is now a hotel, conference centre and golf course and was formerly a small priory founded by Austin Canons in the 13th Century. It existed until 1537 when it was suppressed by Henry VIII and handed over to the crown. After 280 years the small Priory of Breadsall was closed. Following the closure of the priory the buildings fell into disrepair and decay. The late 16th Century saw the buildings converted into a dwelling house, but it is not clear how much of the original priory buildings were used and incorporated into the new E-plan east facing house, typical of an Elizabethan or early Jacobean house. It was greatly enlarged and remodelled c.1861 by Robert Scrivener and with a west wing of 1906, both in Elizabethan style. It was opened as a hotel in 1976. There have been numerous alterations to the buildings and various additions including the construction of a bedroom wing and the gardens and grounds being turned into a golf course. The setting of Breadsall Priory remains little altered, it is still situated within a secluded sheltered hollow amongst the wooded hills north of Breadsall. This secluded setting contributes to its significance.

Little Eaton Conservation Area (A64)

- 6.10.23. Little Eaton is located approximately 1.2km north of the existing Little Eaton junction. The main settlement of Little Eaton is surrounded by open countryside and is set within the valleys formed by the congruence of the River Derwent and Bottle Brook. It is surrounded by the hills of the Blue Mountains and Drum Hill and by woods. The village dates back to the Saxon period. It was an agricultural area with corn mills, quarries and brewing. During the 19th Century, it was influenced by the Industrial Revolution. At this time half the parish was owned by Jedediah Strutt a key person in the Industrial Revolution, the other half was owned by the Tempest family who ran the largest paper mill in Europe. The Derby Canal Railway ran from a terminus of the Little Eaton branch of the Derby Canal to the quarries and mines in the valley. To recognise the historic and architectural interest of Little Eaton in the 1990s, the centre of the village was designated as Little Eaton Conservation Area (A64). There are 14 listed buildings within the conservation area that reflect the development of the village from the early 18th Century (mainly agricultural in origins), through to the 19th Century such as the grade II listed Queen's Head public house (A162) which lies on the Alfreton Road and denotes the importance of the road as a transportation route within an industrialising area. There are several buildings of local importance.
- 6.10.24. To the south of the conservation area is the grade II listed Clock House (A164). This is a late 18th Century house built for the agent of the Derby Canal at the junction of the Derby Canal and the Little Eaton Gangway (narrow gauge industrial waggonway). The significance of the house lies in its architectural and historic significance as part of the industrialisation of rural Derbyshire with the advent of the industrial revolution. The original setting adjacent to the canal and gangway would have been of important strategic importance for the functioning of the building and the agent it housed. However, over the years and since the closure of the canal, the land surrounding the house has been developed into small industrial units and other commercial premises. The house is now surrounded by modern development. This setting does not positively contribute to the significance of the building.

Allestree Conservation Area (A66)

- 6.10.25. Allestree Conservation Area (A66), designated in 1991, is located approximately 1.3km west of the existing Little Eaton junction. It is based around this historic core of the village, centred on Park Lane, Cornhill and St Edmund's Close. The most significant building in the conservation area is the Church of St Edmund (A210) which dates from the 12th Century with a 13th and 15th Century tower, but largely rebuilt in 1865 - 66 by HI Stevens and FJ Robinson, both well respected Derby architects. The conservation area contains eight other listed buildings; these being 10 Cornhill (A269), 8 Cornhill (A271), 11 - 15 Cornhill (A272), Yew Tree Cottage (A273), and The Hollies Farmhouse (A274) which are all grade II listed vernacular buildings. The origins of these buildings are largely due to the village's agricultural origins. Other grade II listed buildings include the Village Pump (A270); Red Cow Inn (A275), the Old School House (A276) and Allestree War Memorial (A277) which illustrate a complete picture of the village. The conservation area borders Allestree Park. The conservation area is characterised by infilling in amongst the historic properties and the historic core surrounded by 20th Century housing estates and this now forms the setting of the conservation

area and the listed buildings contained within it. The later development does not contribute to the significance of the conservation area or listed buildings as it removes any visual connection with the rural landscape beyond.

Allestree Hall (A202) and Park (A145)

- 6.10.26. Allestree Park is located to the north of Allestree (approximately 700m north-west of the Scheme mainline). It is located within the Derwent Valley Mills 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. Unfortunately 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 and the park were sold to a developer in 1928 who planned to build 2,000 houses around the existing golf course. Development stalled at the advent of the World War II, but not before houses were built on Main, Short and Evans Avenue. The Hall and Park were acquired by DCiC after the war in 1946 who 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. It 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. DCiC 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. 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.
- 6.10.27. The Hall sits within 129 acres of former parkland, now an eighteen-hole golf course with other recreational facilities including orienteering course, nature trails and fishing. 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.
- 6.10.28. 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 slope 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 Derwent Valley Mills WHS. The setting contributes to its significance. Allestree Hall and Park are considered to be the physical attributes that help convey the OUV of the WHS and are thus considered within the HIA further (refer to Appendix 6.1 [TR010022/APP/6.3]).

Darley Abbey Conservation Area (A67)

- 6.10.29. Darley Abbey, including the Mill complex, Park and Stables, is located approximately 2km north of the centre of Derby. It is located on the west side of the River Derwent with the mill complex over the river to the east. The Mill complex is bounded to the north and west by the inside of a broad bend in the river. Through the centre of the complex is Old Lane, which links the Mill buildings to the village of Darley Abbey via a toll bridge over the river.
- 6.10.30. Darley Abbey Mills and Darley Park and Stables are a key part of the Derwent Valley Mills WHS. Darley Abbey Conservation Area (A67), designated in 1970 and extended in 2003, is located approximately 1.5km from the existing Little Eaton junction. The conservation area is centred on the historic core of Darley Abbey (A212) and Darley Abbey Mills and the Church of St Matthew (A183). The origins of the conservation area date from the 12th Century when the Abbey of Darley was founded on land given to the church by Robert de Ferrers, Earl of Derby. The once prosperous Abbey was surrendered by the Abbot under the Dissolution of 1538, and within two years, most of the abbey buildings had been dismantled and their materials used elsewhere. The main reason for the designation of the conservation area and inclusion within the Derwent Valley Mills WHS is the continued existence of the majority of the industrial village built by Thomas Evans in the 18th and early 19th Centuries. Evans was supported by the industrialist Richard Arkwright. Although a paper mill and a flint mill already existed on the west bank of the River Derwent, it was the construction of The Boar's Head Cotton Mill in 1783, one of a series of important industrial enterprises in the Derwent Valley, that was of major significance in the Industrial Revolution. Boar's Head Mills was followed by Middle, East, West and North Mills (A200 and A201). These substantial mills were surrounded by ancillary buildings used for cotton preparation and storage, bobbin spinning, a saw mill and stables and were equally important to the functioning of the complex. Others mills were also developed at Derby, Belper and Cromford at this time.
- 6.10.31. To cater for the new workforce, houses were also built. The historic settlement survives virtually intact and includes The Square, Four Houses, buildings in Mile Ash Lane, Brick Row (A213 and A214) and Lavender Row. In addition, Evans also financed the Church of St Matthew's (A183), a grade II listed building (built 1818 - 19 extended 1895 - 96, architect: Moses Wood of Nottingham). It was constructed of stone with a slate roof in the Gothic style with a prominent four pinnacled west tower that is a prominent feature in views to Darley Abbey. The churchyard has slate plaques commemorating the lives of Evans and employees and villagers. The church illustrates the influence that Evans had on every aspect of the workers lives.
- 6.10.32. The Hall and the park pre-date Thomas Evans industrial endeavours as they are linked to the former Augustine Monastery of St Mary.

- 6.10.33. The complex operated continuously throughout the 19th Century and through to the middle of the 20th Century. However, its demise mimicked a UK-wide reduction in manufacturing of textiles, and production eventually ceased in the 1970s.
- 6.10.34. Many of the buildings within the Mills complex are listed. Long Mill, Middle Mill, East Mill, West Mill Engine House, Bobbin Shop, Coppice Barn A, the Watch House, and the Chimney are all grade I listed buildings (A198). North Mill, the proto-fireproof building, and the open fronted shed are grade II* (A201 and A200), whilst the Saw Mill, Coppice Barn B, No1-3 Old Lane and No 4 Old Lane are grade II.
- 6.10.35. The Mill is located within the valley and along the banks of the River Derwent. The Mill complex feels detached from the surrounding landscape. It is surrounded by mature trees on the river bank to the east, north and west. It is self-contained and inward looking. The development of the Mill on the banks of the River Derwent is a key element of its setting and significance.
- 6.10.36. The boundary of the conservation area is tightly drawn around St Martin's Church, the historic element of the village, the listed Mill and Darley Park to the south. It has relatively recent development to the west and south. The conservation area is defined by the River Derwent to the north and south, although a little to the east lies an industrial estate which flanks the railway line from the roundabout at the junction of the A61 and Alfreton Road. The flat topography and the mature trees limit the setting of the conservation area.
- 6.10.37. Together, the village, Mills, park and surviving remains of the Hall form a collection of outstanding cultural value that reflects Derby's international importance during the 18th and 19th Centuries. The former Darley Abbey Mills at Darley Abbey is the most complete surviving cotton mill complex in the Derwent Valley Mills WHS. It includes some exceptional examples of early large scale factory buildings some with pioneering technological significance. Darley Abbey is considered to contain physical attributes that convey the OUV of the WHS and are therefore considered further within the HIA (refer to Appendix 6.1 [TR010022/APP/6.3]).
- 6.10.38. The significance of the Mill complex is heightened by the near complete survival of its associated workers' settlement at Darley Abbey on the opposite banks of the River Derwent. The Mill complex, in conjunction with other industrial complexes (those at Masson Mill, Cromford, Belper and Mitford Mills, Lea Bridge, Peckwash Mill and the Silk Mill in Derby) form part of the cultural landscape of outstanding significance.
- Kedleston Hall (A216), registered park and gardens (A215) and associated listed buildings (various)
- 6.10.39. Kedleston Hall (A216), a grade I listed building, is located approximately 4km from Markeaton junction, and approximately 5km from Little Eaton junction. Kedleston Hall lies at the centre of the grade I Kedleston Registered Park and Garden (A215). The park and gardens were laid out by Robert Adam during the period 1759 - 75.

- 6.10.40. The approximate 400ha site is located on land which slopes gently down on each side to the valley of Cutler Brook. The village of Kedleston is situated outside the registered area at the north-west corner of the site. Kedleston Hall is at the centre of the park on a platform overlooking the lakes to the north. The house was originally built for Sir Nathaniel Curzon who inherited the estate in 1758; the earliest known house on the site was extant by 1600. Curzon demolished the 12th Century house and moved the nearby village to make an idyllic parkland setting for his new mansion. In 1758 Robert Adam was appointed to build the house. The existing house was constructed between 1758 - 65 by Matthew Brettingham, James Paine and Robert Adam. Drawing on ancient Rome and 16th Century Italian architect Palladio, Adam wanted to design a house that would rival Chatsworth. The interiors were completed by the 1780s. It is constructed of red brick faced in ashlar and render under hipped Welsh slate roofs. The main rectangular block features quadrant colonnades and rectangular pavilions following Palladio's Villa Mocenigo.
- 6.10.41. Adam also designed many other buildings within the park and estate including the grade I listed bridge and cascade (A228), the Boathouse with fishing pavilion (A227). Inside Adam supervised almost every detail of the decoration and the fittings, from the plasterwork to door handles. The result is a masterpiece of mid-18th Century English architecture and considered one of the finest houses of its period in the country.
- 6.10.42. Immediately to the west of the Hall lies All Saints Church (A240). The church is the only survivor of the medieval village. Curzon did not want to demolish the burial place of the Curzon's family. The building dates from the 12th Century, although there were many other subsequent alterations, including 17th Century additions to the east front elevation of the Hall. West of the church there is a stable block and coach houses (A236).
- 6.10.43. In addition to the house, Robert Adam also laid out the Pleasure Grounds, as the area to the south and the west of the house was known, in the informal manner of 'Capability' Brown, with broad lawns and a ha-ha providing uninterrupted views over the parkland beyond. It is one of the only examples where Robert Adam designed both the house and largely the gardens. There are two main entrances, the South Lodges (A218) on the north-west of the site with paired lodges from which the drive leads south-east to the Hall. North Lodge (A225) is on the north-east side and has a pedimented entrance arch. From here the drive runs south-west, across the lake via the bridge with an integral arch (A228) to the Hall. There are impressive views of the Hall, lakes and park from this approach. A secondary entrance with a lodge called Ireton Lodge is on the north side of the park.
- 6.10.44. The gardens lie to the south and west of the Hall. On the north side of the Hall there is a forecourt with lawns which is divided from the park by an ironwork screen (A239) and a ha-ha. The ha-ha continues around the east and south sides of the Hall. There is a gravelled apron in front of the south front of the Hall, and the Pleasure Grounds to the south and west consist of informal beds planted with ornamental shrubs and scattered trees. Some 100m south-west of the Hall there is a sunken garden with quartering paths laid out in the 1920s which is overlooked from the south side by the Hexagon Temple, the Summer House (A232), listed grade II*. The Orangery (A235), listed grade II*, is situated

approximately 250m south-west of the Hall. A statue of a lion by Joseph Wilton (A231) approximately 1760, listed grade II*, lies approximately 100m south-west of the Hall, and immediately west of this the Monument to Michael Drayton (A233) approximately 1760, listed grade II*, consists of an urn on a pedestal. Immediately west of the churchyard wall on the north side of the garden there is an arcaded shelter (A237), listed grade II, with an icehouse attached to the east, which is concealed by a rockery. The arcade is built against the rear (south) wall of the stables and a central door leads through into the stable yard.

- 6.10.45. A gate with gate piers of carved stone salvaged from the House of Lords in 1928 lies approximately 300m west of the Hall and this leads to a walk along a causeway with ha-has on each side called the Long Walk. The three-mile Long Walk is an elevated walk with views between trees back to the house and over the lakes, and over parkland to the north and south. A rustic temple called the Hermitage (A230), listed grade II, lies on the southern edge of the causeway approximately 650m west of the Hall. This was probably designed by Adam who laid the walk out during 1760 and planned a number of temples, alcoves and seats, most of which remained unexecuted, as incidents along the way. The walk enters woodland called Pleasure Grounds Wood approximately 900m west of the Hall from which point the ha-ha on the north side continues west to the edge of the park and that on the south side dies away and is replaced by a fence. The walk curves around to the south and then turns eastwards along the southern edge of the park through Vicar Wood from which there are views of the Hall and park. The walk continues to the south-east corner of the park and descends north to the south-east corner of the lake. Turning west the path follows the edge of the lake and views are obtained across the water to the Sulphur Bath House (A229) and over the park to the Hall.
- 6.10.46. The remains of ornamental gardens lie on the north side of Kedleston Road opposite Ireton Lodge. The gardens were at one time extensive and of sufficient note to be the subject of a poem in the Gentleman's Magazine of 1744. The walls (A220) are the only reminder of this ornamental garden. Ireton Farm and outbuildings (A221) lie to the south. A folly, the Gothic Temple (A222) now a house lies to the east of the farm.
- 6.10.47. The park on the north side of the Hall is dominated by a series of three lakes which replaced a canal and an octagonal pond designed by Bridgeman 1722 - 26. A narrow stretch of water descends over the weirs from the north-west side of the park and this widens into an almost circular pool with a central island immediately north of the bridge carrying the north drive. The water descends as a cascade beneath the three arches of the bridge into the middle lake which has a serpentine outline and stretches to a point approximately 550m east of the Hall where there is another cascade feeding water into the lower lake. Changing views of the park, Hall and lakes are the principal feature of the north side of the park, and the bridge acts as a focal point for views from the Hall. The park rises to the north of the lakes as open pasture with scattered trees and clumps. A golf course of 1947 occupies the north-east side of the park and within this, approximately 550m north-east of the park, sits the Sulphur Bath House (A229) which forms an eye-catcher within the landscape. The park on the south side is open with pastures and scattered trees. Vicar Wood runs along the skyline and shelters the southern boundary.

- 6.10.48. The Derby Screen was planted around 1960 to obscure views of Allestree and the modern development that had encroached over the horizon as well as the night-time glare from the increasingly developing Derby. Its planting was a deliberate decision to make the park more enclosed and inward looking. Originally there were views out from the Hall and park towards Derby, similarly there would have been glimpsed views into the park on approach. Beyond the boundary Derby, Allestree and other urban influences are visible in glimpses nestled in amongst the undulating landscape. The park was carefully designed and laid out in a naturalistic manner. The park was designed to have views out of and into the Park through glimpsed views. These have been lost through the planting of the Derby Screen. However, the farmland surrounding the park was historically part of the estate. Whilst in different ownership, this still forms the setting for the park and contributes to the naturalistic design of the park. Allestree, the settlement, stands on land formerly associated with the Kedleston estate and does in this respect form part of the associative setting of the park. Allestree as a settlement of 20th Century housing does not contribute to the visual setting of the park.
- 6.10.49. The significance of Kedleston Hall lies in its architectural achievement as Robert Adam's first truly major commission, marking a milestone not only in his career, but in the history of English taste. Designing and influencing the buildings, interiors as well as the landscape it has significant design interest and historic interest. The setting of the Hall, the gardens and many other buildings and structures within a complete Pleasure Ground contributes to the significance of the Hall.
- 6.10.50. The setting of the Kedleston Hall and the Registered Park and Garden has been the focus of much attention recently as a result of a planning application located approximately 1.7km to the south-east of the Hall and about 500m from the boundary of the Registered Park and Garden. This has resulted in an appeal and subsequently a lengthy and complex legal challenge that has, so far, involved three rounds of appeals and legal challenge in the courts. *Catesby Estates Ltd v. Steer* [2018] concluded that the original inspector had properly considered both visual effects as well as the historic, social and economic relationship between the site and Kedleston Hall and re-instated the Inspector's decision from August 2016. The July 2016 Planning Appeal Decision [Ref. APP AVA/2014/0928] concluded that the setting of Kedleston Hall extended no further than the Derby Screen. The setting of the Registered Park and Garden is more extensive and includes farm land surrounding the park.

Locally listed buildings

- 6.10.51. In addition to the 35 listed buildings, there are a further twenty-four locally listed buildings that are on the City of Derby Local List, and three that are on EBC Local List. Not all of them are included in the text below due to the assets not having the potential to be affected by the Scheme.

Kingsway junction

- 6.10.52. Kingsway Hospital Nurses Home, Uttoxeter Road, Derby (A53) was designed as a Nurses' Home in 1934 for the hospital site by a local architect. It is a simple, mostly neo-Georgian brick building with hipped tiled roofs, multi-paned sash windows and French doors with fanlights. It sits within the landscaped hospital grounds. The significance of the heritage asset lies in historic association with the hospital and provision of health care pre-dating the National Health Service.
- 6.10.53. An Edward VIII cast iron pillar box, Brackensdale Avenue, Mackworth, Derby (A54) is sited at the junction with Greenland Avenue; it is one of only 271 surviving in the country. It contributes toward a rich and varied street scene. The significance of this heritage asset lies in its historic interest as a rare survivor and an important contributor to the street scene.

Markeaton junction

- 6.10.54. Manchester Road Maltings, Ashbourne Road, Derby (A26) is a 19th Century mill constructed on brick under slate hipped roof with impressive central chimney and cowl. It is of three storeys plus attic storey with arched windows, fenestration details which are substantially altered. It is situated on Manchester Road which runs parallel to Ashbourne Road. The significance of the building lies in its historic interest as a former mill illustrating the historic industry of Derby. The distinctive architectural response, particularly the cowl, reflects the functionality of the building as a former malting house. It sits tight on the pavement edge with a small yard to the east and is experienced in a residential area.
- 6.10.55. The Wagon & Horses Public House (now converted into apartments), No. 149 Ashbourne Road, Derby (A27) is an early 19th Century red brick, two storey pub of four bays with dressed stone window surrounds, and a slate covered roof. On the ground floor left there is a timber coach entrance to the rear yard, modern casement windows with central stone mullion, recessed arch entrance door with stone steps, slightly set forward to receive a blocking course from a canted bay window, with modern windows. There is a semi-circular headed timber door to the rear yard on the right. On the first floor there are stone shouldered arch windows with stone architraves and a moulded stone eaves course. It sits tight to the pavement edge in a linear terrace of buildings of similar period. The significance of the heritage asset lies in its historic usage as a pub on a busy coaching road into Derby. Its setting is defined and experienced in an urban environment.
- 6.10.56. The gates and railings to the former church, Ashbourne Road, Derby (A28) of ornate wrought iron design are situated at the corner with Surrey Street. These enclose an area of land that would have once been the grave yard or land associated with the church. They are a decorative feature of the streetscape, but their setting is limited beyond the immediate street scene. The significance of the structures lies in its association with the former church.
- 6.10.57. The former home for Penitent Females, Bass Street, Derby (A29) was built in 1866 - 68 to the designs of Derby architect George Henry Sheffield. It is a simplified neo-Gothic brick built building with stone dressings and contrasting sandstone banded semi-circular entrance arch. Built for a charity and then owned by the local authority, it was converted to apartments and extended in 1993. It is located on a residential street behind the principal Ashbourne Road. The

significance of this heritage asset lies in its architectural interest as a distinctive neo-gothic building. Its historic interest lies in the Victorian imperative to reform social behaviour to an acceptably moral standard. Its setting is sub-urban and is enhanced by the presence of similar period buildings on the street.

- 6.10.58. St Barnabas Church, Radbourne Street, Derby (A44) is a large stone built Victorian neo-Gothic church with no tower, a full height hexagonal apse and single storey side aisles. It was built in 1880 - 82 to the designs of Arthur Coke-Hill; the apse and vestry were added in 1903. The significance of this heritage asset lies in its ecclesiastic architecture and its historic interest within a Victorian suburb to providing moral guidance to its congregation. It sits within a residential sub-urban area of Derby and its setting is related to the houses that surround it.
- 6.10.59. A cast iron sign, 191 Ashbourne Road, Derby (A45) is a small cast iron sign that is attached to the wall of No. 191 reading 'Court No. 2'. It is a surviving reminder of the back yard residential courts characteristic of 18th and 19th Century Derby. It is intrinsically linked to the former residential area to which it is referring to. The significance of this heritage asset lies in its historic interest denoting a form of built development within Derby.
- 6.10.60. A former malthouse, brewery and vinegar works, Sherwin Street/Kedleston Road (A46) was built by Henry Sherwin in the late 1870s with further alterations in 1906 to convert it to a brewery. The house-cum-office on the corner of Sherwin Street was added around the same time. It was later converted to a vinegar works becoming Derby Malt Vinegar Company, but was converted to a residential nursing home for the elderly in 1985. Its setting is defined by the residential sub-urban area in which it sits. The significance of this heritage asset lies in its historic interest as a site of industry, illustrating an important aspect of Derby's industrial heritage.
- 6.10.61. Markeaton Primary School, Bromley Street, Derby (A47) is an early 20th Century red brick school building with hipped roofs with sprocketed eaves and projecting gables with parapets. Many original features remain, including chimneys, slate roof, timber sliding sash and pivoting windows, and ornate entrance gate. It is classic school architectural style of the period and its setting is defined by the residential area in which it sits. The significance of the heritage asset lies in its architectural form which is typical of educational buildings and institutions of the time.
- 6.10.62. Britannia Mills, Markeaton Street/Mackworth Street, Derby (A55) is a four storey brick built mill with an attic storey within the mansard roof. The entrance is through a two storey corner tower facing Markeaton Street, with stone domed roof and very elaborate stone doorcase, with a segmental pediment. The ancient mill pond with stream and leat connections to the Markeaton Brook still lies adjacent. Its setting is characterised by the sub-urban residential area in which it sits. The significance of this heritage asset lies in its historic interest as a former mill illustrating an important aspect of Derby's industrial past.

6.11. Historic landscape

- 6.11.1. This section has followed the methodology and guidance for historic landscape character assessment as set out in 'Assessing the Effect of Road Schemes on Historic Landscape Character' (Highways England, 2007b) and contained in DMRB Volume 11, Section 3, Part 2, HA 208/07, Annex 7 (Highways England, 2007a).
- 6.11.2. DCC Historic Landscape Character Assessment (DCC, 2016) was published online in 2016 and comprises database records and associated GIS polygons. This dataset formed the basis of this assessment.
- 6.11.3. 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), and the Needwood and South Derbyshire Claylands (Character Areas 68), covering Kingsway and Markeaton junctions.
- 6.11.4. A number of other sources were consulted to inform the assessment, including the following:
- DCC Historic Environment Record provided information about known heritage assets.
 - Derwent Valley Mills WHS Management Plan (DCC, 2014).
 - Derbyshire Records Office was consulted for historic Ordnance Survey and pre-Ordnance Survey maps.
 - Online resources were consulted for modern aerial photographs.
 - Information from a number of heritage walkovers were used to ground truth the DCC historic landscape character assessment, and to identify other elements that contribute to an understanding of the historic landscape.
- 6.11.5. The historic landscape character areas discussed in this section are shown on Figures 6.8 and 6.9 [TR010022/APP/6.2]. The character areas that are shown are those that have been identified within an approximate 500m radius of each of the three junctions.

Kingsway and Markeaton junctions

- 6.11.6. The junctions are within Natural England's National Character Area 68 (Needwood & South Derbyshire Claylands) (Natural England, 2012). Villages within the river valleys had been established by the 11th Century surrounded by extensive open fields and with pockets of dispersed settlement and enclosed fields. Some of the former medieval strip fields are still visible. Landscaped parks and country houses emerged from the 16th Century. Derby expanded dramatically during the late 18th Century through industrial development, elsewhere during the 18th and 19th Centuries the area remained rural. Improvement of the main roads in the 20th Century has fostered urban expansion beyond its historic core.
- 6.11.7. Five broad historic landscape character areas have been identified as detailed in the sections below.

Post-medieval and Modern Settlement

- 6.11.8. Elements of the historic settlement of Derby are present along the eastern side of the study area. Terraced housing along the western urban fringe of Friargate (between the demolished Derbyshire and North Staffordshire Extension line, Great Northern Railway and Ashbourne Road) which extends towards Queensway had been built by the 1880s (HDR767), although there has been more in-filling in the 20th Century. Similarly terraced housing along Cedar Street and part of Kedleston Road ('Cedar Terrace') was present from the end of the 19th Century (HDR769), but is now surrounded by later development.
- 6.11.9. There has been extensive residential development across the western side of Derby as a result of improvements to the road network during the 20th Century, particularly around Queensway (Mackworth) and between Friargate and the A38 (HDR766.1). Development comprises large planned housing estates with associated infrastructure and patches of green open space. At Mackworth, in the area between Ashbourne Road and Kingsway, residential houses had replaced fields with extensive ridge and furrow earthworks (visible on RAF photograph of 1945). More recently there has been new residential development at the Kingsway Hospital site, to the south of Kingsway junction.

Historic and 20th Century strategic communication routes

- 6.11.10. Ashbourne Road is an historic route into the City of Derby and was created as a turnpike road in the 18th Century (sanctioned by Act of Parliament in 1738) (A19). During 19th Century industrialisation the city boundaries were extended along it. Development continued during the 20th Century fostered by the creation of Queensway.
- 6.11.11. Kedleston Road is part of the Derby to Brassington turnpike road (A18) with development along it in the 19th and 20th Centuries.
- 6.11.12. Queensway and Kingsway belong to the pre- and post-war periods and have undergone periodic road improvement schemes. Kingsway junction was re-aligned south of the Derbyshire and North Staffordshire Extension line in the later 1970s. The A38 has fostered extensive development on the west side of Derby.
- 6.11.13. The Derbyshire and North Staffordshire Extension line (Great Northern Railway) which opened in 1878 linked the coalfields of the East Midlands with the towns to the south-west of the city (such as Burton on Trent). Construction had a severe impact on parts of the historic city, but it encouraged industrial development and further expansion.

Modern industrial, civic and commercial

- 6.11.14. At Kingsway junction, Derby College (HDR5782) occupies a large plot between the Derbyshire and North Staffordshire Extension line and Mackworth. South of the college and the disused railway line is Murray Park School (HDR5784), Earlswood Drive, Mickleover which was built in the 1970s.
- 6.11.15. Kingsway Hospital (HDR5779) occupies a narrow slice of land to the south of Kingsway junction and is first depicted on Ordnance Survey maps from the late 1930s (the area to the south was previously occupied by the borough asylum and is now a housing development). North of Kingsway is a modern retail park that has been built on land that has been used historically for mineral extraction

associated with the brickworks that were close to the disused Derbyshire and North Staffordshire Extension line (the former brickworks later became a landfill site), east of Kingsway junction.

- 6.11.16. At Markeaton junction there are clusters of educational facilities that were established in the 20th Century. This includes the Royal School for the Deaf on Ashbourne Road (HDR5521), the University of Derby, Markeaton Street (HDR5522) and Kedleston Road (HDR5525).

Post-medieval and modern ornamental, parkland and recreational

- 6.11.17. Mackworth Park (HDR5785), located west of Kingsway junction (south of the Derbyshire and North Staffordshire Extension line) was created in the late 1970s following the construction of the existing Kingsway junction. Within the park the existing field boundaries broadly reflect the late 19th Century layout, although they were truncated by the construction of Kingsway junction resulting in some boundary loss.
- 6.11.18. There are playing fields north of Magdalene Drive, Mickleover (HDR5783) that belong to Murray Park School which have been created out of farmland shown on 1880s Ordnance Survey maps (1:10,560) resulting in boundary loss.
- 6.11.19. There are allotments (HDR5520) north of Markeaton Street which are depicted on Ordnance Survey maps from the 1950s (1:10,000). These occupy an area that was farmland in the 1880s, between the Mill Pond and Markeaton Brook. Next to the allotment is 'Mundy Pleasure Ground' (HDR5519) that is shown on Ordnance Survey maps from 1919 (1:10,560). The pleasure grounds are bounded by Markeaton Brook to the south and west and it is part of a larger recreation area that was a field in the 1880s, but which has been severed by Mackworth Road which now forms the eastern side of the pleasure grounds.
- 6.11.20. Playing fields at Markeaton junction (HDR5523), to the south of Kedleston junction were formerly partly occupied by the demolished Sturgess School.
- 6.11.21. Markeaton Park (A10) (HDR5524) is located alongside Markeaton junction between the Ashbourne Road and Kedleston Road. The park was created in the 1770s out of an estate that had medieval origins, including a deer park (A8).
- 6.11.22. In 1930 the house and gardens were gifted to the City of Derby and the remainder was sold to the Borough. In World War II the park and hall were used as an army camp.

Fields and Enclosed Land

- 6.11.23. At Kingsway junction there is a small group of small irregular fields (east of Murray Park School) (HDR5786) that retain their late 19th Century layout. There has been minimal boundary loss as a result of the construction of Kingsway junction, although they abut the demolished Derbyshire and North Staffordshire Extension line to the north.
- 6.11.24. West of Kingsway Hospital is the truncated remains of fields (HDR5781) that were shown on the 1880s Ordnance Survey maps (1:10,560). Severe boundary loss has resulted from the construction of the hospital and grounds at Kingsway.

Little Eaton junction

- 6.11.25. 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).
- 6.11.26. The landscape character assessment for Derwent Valley Mills WHS (DCC, 2014: Appendix 5) describes the landscape type as predominantly river meadows, overlooked by sandstone hills 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).
- 6.11.27. Six broad historic landscape character areas have been identified as detailed in the sections below.

Medieval, post-medieval and modern settlement

- 6.11.28. 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

- 6.11.29. 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 line, and Derby Canal).
- 6.11.30. 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 works to Alfreton Road and when Little Eaton junction was constructed. North of Starbucks café carpark (the former Ford Farm) a stretch of the disused canal survives alongside the road as an overgrown and partly in-filled linear channel, including the towpath that appears to be defined by a line of trees that appear to be the remains of an overgrown hedgerow. The

canal survives either side of Croft Lane (where the lane originally joined Alfreton Road).

- 6.11.31. The Midlands 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.
- 6.11.32. Roads had been 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 into the floodplain of the River Derwent, including concrete overbridges across the Midland Railway line, River Derwent and an underpass between the river and the railway. The construction of a new spur road that links Croft Lane to the A61, south of Breadsall, has also introduced new road infrastructure.

Post-medieval and modern industrial, civic and commercial

- 6.11.33. 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.
- 6.11.34. Along Alfreton Road on the southern side of Little Eaton there is a small, 20th Century, industrial estate (off Duffield Road) (HDR3474). The Derby 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 which was built in the 1970s, north of Little Chester (Derby) on Alfreton Road (HDR3140).
- 6.11.35. 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 former refuse tip, registered landfill site and licensed waste management facility as shown on Ordnance Survey maps from the 1970s.

Modern ornamental parkland and recreational

- 6.11.36. There is a small static caravan park (Ford Farm Mobile Home Park) and vehicle/container/materials storage area alongside Ford Lane, including the Starbucks cafe (formerly Ford Farm) and a house 'Fourways' (shown on Ordnance Survey maps from 1974) (HDR3472).

Medieval, post-medieval and modern fields and enclosed land

- 6.11.37. 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. Fields of note have been defined as follows:

- '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 (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 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 time depth with probable earlier origins for them 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

- 6.11.38. 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 is classified as secondary woodland.
- 6.11.39. 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.
- 6.11.40. 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).

Derwent Valley Mills WHS

- 6.11.41. The HIA for the Derwent Valley Mills WHS is contained in Appendix 6.1 [TR010022/APP/6.3]. For the purposes of this assessment, and as there would not be any direct physical impacts upon the historic buildings and archaeological remains that contribute to the Derwent Valley Mills WHS (A41), this asset has been considered as part of the historic landscape.
- 6.11.42. The Derwent Valley Mills WHS and buffer area (A41) is located immediately adjacent to Little Eaton junction (see Figures 6.2, 6.5 and 6.6 [TR010022/APP/6.2]). The WHS occupies the Derwent Valley and is bound to the east by the Midlands Railway line. Running through the heart of the site is the River Derwent which was significant to the industrial development of the valley. 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. 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 19th Centuries, has survived. Overall the setting of the WHS is reflected in the landscape that reflects the technological, social and economic development and the way the modern factory system developed within this rural area on the basis of water power. The complete Derwent Valley Mills WHS consists of a continuous strip approximately 24km long, from the edge of Matlock Bath in the north, to almost the centre of Derby in the south. The sites within it are owned by many different land and property owners and protected through a variety of UK planning and conservation laws. It is also a popular destination for local people and tourists.

6.11.43. The part of the WHS in the vicinity of the Little Eaton junction study area is characterised by the River Derwent that runs to the west of the existing junction, expansive views of the Derwent Valley, the appreciable topography of the surrounding rural landscape, the former canal and the railway line. The existing A38 intersects the Derwent Valley Mills WHS, with the section at Little Eaton effectively cutting through the narrowest part of the designated area. Many of the existing transport links within the Derwent Valley Mills WHS have a clear link and contribute to the OUV of the WHS. The former Derby Canal, railway and the historic road network, including the A6 have played a key role in its development. The A6 is the major highway route into and out of the World Heritage property. The existing A38 is a more recent addition to the road network, forming the strategic route from Birmingham through Derby, to the M1 at junction 28, and carries significant volumes of north-south long distance traffic. The impact of the current A38, where it meets and transects the WHS, is thought to have a negligible impact on the significance and setting of the WHS. The WHS is discussed in detailed in the accompanying HIA (Appendix 6.1 [TR010022/APP/6.3]).

Assessment of the historic landscape

- 6.11.44. The historic landscape character at Kingsway and junctions is overwhelmingly urban as a result of 20th Century development that has introduced a modern transport network and mixed urban development into an area that was formerly farmland on the periphery of the City of Derby. There are pockets of urban open space, but these are fragmentary and have mostly been created and designed out of former farmland. Markeaton Park retains elements of the 18th Century designed landscape, but it has also undergone significant change since the 1930s as a legacy of the army use of the park, the creation of a municipal recreation park, and the introduction of Markeaton junction.
- 6.11.45. Little Eaton junction retains historic time depth represented by medieval earthworks, post-medieval enclosure field boundaries and farmland that are present outside of the historic settlement cores; and the surviving elements of the historic transport network that helped to foster the industrial revolution. Historic landscape character area 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 a 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.
- 6.11.46. The area around Little Eaton junction 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 18th and 19th 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.

6.11.47. These are assessed in greater depth within the HIA. In this respect the area contributes and is part of the physical attributes which embody the values for which the WHS is inscribed.

6.12. Future baseline

6.12.1. As detailed within Chapter 4: Environmental Impact Assessment Methodology, in order to identify the effects of the Scheme on environmental features, it is important to understand the baseline at the year of construction and the future baseline at the year of Scheme opening/operation, as these may be different from those that currently exist. Such changes could alter the sensitivity of existing environmental receptors, as well as introduce new sensitive receptors.

Construction year baseline (2020)

6.12.2. The baseline details as reported in the sections above describe the cultural heritage assets as they were in the years that investigations and desk top baseline studies were undertaken (2015 - 2019).

6.12.3. Preliminary works associated with the Scheme are anticipated to start in late 2020, subject to securing a DCO (refer to Chapter 2: The Scheme, Section 2.6), with the main construction works starting in 2021.

6.12.4. The majority of the land that would be impacted by the Scheme (and in its vicinity) at Kingsway junction and Markeaton junction comprise the existing A38 highway and other highway infrastructure, as well as surrounding residential areas and areas of public open space. At Little Eaton junction, the majority of the land that would be impacted by the Scheme (and in its vicinity) comprises agricultural land as well as the existing A38 highway and other highway infrastructure, plus residential and commercial areas. As such, environmental baseline conditions are not anticipated to change significantly by 2020 from the conditions as detailed above. However, as detailed in Chapter 15: Assessment of Cumulative Effects, a number of development projects are ongoing, or are planned, that have the potential to change baseline conditions. Whilst these are not likely to significantly change baseline conditions within the cultural heritage study area, the following changes are anticipated by the construction baseline year (2020) (the number in brackets refers to the development numbers as detailed in Appendix 15.2 [TR010022/APP/6.3]):

- A new footpath within Mackworth Park (No 3) will be operational.
- The development at Radbourne Lane (Langley Country Park) (No 41) will have been completed. Developments within the Mackworth College site (No 4), within the Kingsway hospital site (No 16) and land north of Mansfield Road (Breadsall) (No 34/40) will be further progressed.
- The NHS carpark for 600 cars located to the west of Kingsway Hospital and north of Northmead Drive (No 17) will have been fully developed and will be operational.
- Residential developments at Hackwood Farm (No 24/36), land south of Mansfield Road (Breadsall) (No 35), and land at Kedleston Road (No 42) are anticipated to have been started with resultant land clearance.

- 6.12.5. Other minor developments in the vicinity of the Scheme which are considered to have been completed by late 2020, and thus will be part of the prevailing baseline, are detailed in Appendix 15.2 [TR010022/APP/6.3].
- 6.12.6. It is anticipated that the various developments as detailed above will not significantly change the prevailing cultural heritage baseline within the defined study area.

Opening year baseline (2024)

- 6.12.7. It is not possible to accurately predict baseline environmental conditions for the year of Scheme opening (2024); however, it is anticipated that baseline conditions in the vicinity of the Scheme and within the associated cultural heritage study area will largely be the same as at 2020, although most of the developments as detailed in Appendix 15.2 [TR010022/APP/6.3] are anticipated to have been completed by 2024. In addition, urban pressures associated with an increased population may result in the further expansion of the built environment.

6.13. Potential impacts

- 6.13.1. Mitigation measures incorporated into the design and construction of the Scheme are set out in Section 6.14. Prior to implementation of defined mitigation measures, the Scheme has the potential to affect cultural heritage (both positively or negatively), both during construction and once in operation – potential sources of impact are detailed in the sections below.

Construction phase

- 6.13.2. For the purposes of the cultural heritage assessment, 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 operation phase is when the Scheme is being used by traffic.
- 6.13.3. As identified below, physical impacts upon assets would only occur during the Scheme construction phase; impacts upon the setting of assets' could arise during both the Scheme construction and operation phases.
- 6.13.4. Construction of the Scheme has the potential to result in adverse impacts on cultural heritage, including:

Archaeology

- Partial or total removal of archaeological remains within the Scheme footprint.
- Compaction of potential archaeological deposits by construction traffic.

Historic buildings

- Potential physical impacts on historic building assets. These impacts would be significant in nature.
- Temporary impacts from construction activities, including traffic movement, lighting and noise. These impacts are temporary and, therefore, unlikely to be significant.
- Impacts at Scheme opening, including visual intrusion into historic setting. These impacts can be significant.

Historic landscape

- Potential physical impacts on historic landscapes. These impacts are unlikely to be significant in nature.

Operation Phase

- 6.13.5. Operation of the Scheme has the potential to result in negative impacts on the setting of heritage assets including:

Archaeology

- Archaeological assets would have been removed during the Scheme construction phase. There would be no physical impacts on archaeological assets during the Scheme operational phase.

Historic buildings

- Impacts on setting during Scheme operation. There is potential for impacts on the setting of historic building assets during Scheme operation from lighting and any increases in noise levels. These impacts are unlikely to be significant in nature.

Historic landscape

- The historic landscape would have been impacted during the construction phase. There is potential for impacts on the setting of the historic landscape during Scheme operation from lighting and any increases in noise levels. These impacts are unlikely to be significant in nature.
- Changes to the setting of assets, including those that convey the attributes of the WHS OUV.

6.14. Design, mitigation and enhancement measures

Construction phase

- 6.14.1. Where possible, proportionate measures to avoid or minimise direct impacts on heritage assets have been embedded within the Scheme design (refer to Chapter 2: The Scheme).
- 6.14.2. 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 are already known.
- 6.14.3. 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:
- The Scheme design aims to minimise permanent land-take from Mackworth Park.
 - The Scheme design aims to minimise permanent land-take from Markeaton Park and create a new park entrance and exit that is sympathetic to the significance of the park.

- Sections of the current A38 at Markeaton junction adjacent to Markeaton Park would be removed, designated as public open space, appropriately landscaped and integrated with the adjacent park.
- The Scheme would entail ecological mitigation works within Mackworth Park, Markeaton Park and at Mill Pond – refer to Chapter 8: Biodiversity. This includes the creation of a species rich grassland within Markeaton Park - such planting would not only aim to mitigate some the Scheme ecological effects, but would also enhance the environments within this area of public open space.
- The closed toilet facilities block to the north of the Scheme within Markeaton Park would be removed by the Scheme which would remove this structure which has an adverse impact upon the park entrance setting.
- A section of the Markeaton Park boundary wall would be impacted by the Scheme – this would be carefully dismantled and rebuilt on a new alignment that is sympathetic to the significance of Markeaton Park.
- 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 which is located within the WHS (located between the River Derwent bridge and the Flood Relief Arch/Accommodation Bridge). This area would be closed to prevent vehicle access, appropriately landscaped and provided with pedestrian and cyclist facilities to enable continued access to adjacent pedestrian and cyclist routes. Such 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 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 (refer to Chapter 13: Road Drainage and the Water Environment) 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 2.10 [TR010022/APP/6.2]). 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 Chapter 7: Landscape and Visual. The landscape design takes into account cultural heritage assets, including Markeaton Park, the Derwent Valley Mills WHS, and the Breadsall Conservation Area.

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

- As detailed in Chapter 2: The Scheme, Section 2.5, an Outline Environmental Management Plan (OEMP) has been prepared (refer to Appendix 2.1 [TR010022/APP/6.3]). The OEMP includes a range of good practice measures associated with mitigating potential environmental impacts. The OEMP would be converted into a Construction Environmental Management Plan (CEMP) by the selected construction contractor and implemented 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 (refer to Chapter 7: Landscape and Visual Impact Assessment, Section 7.9).
- The utilities diversion corridor at Markeaton Park would bring construction activities close to the recently installed park gates and pillars at Markeaton Park. Protective fencing would be erected to ensure that the gates and pillars are not damaged during construction activities.
- Parts of Markeaton Park boundary wall that are to be retained would be close to construction activities and thus would be protected by fencing in order to avoid potential accidental damage.
- Construction compounds have been located outside of culturally sensitive areas (refer to Chapter 2: The Scheme, Table 2.3 and Figures 2.12a to 2.12c [TR010022/APP/6.2]). 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, this includes views of the main construction compound at Little Eaton junction from the Derwent Valley Mills WHS.
- 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 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.

Scope of outline archaeological mitigation

- 6.14.5. A staged programme of archaeological mitigation would be implemented in accordance with advice in DMRB Volume 11 Section 3 Part 2 (Highways Agency, 2007a), and Volume 10 Section 6 Part 1 (Highways Agency, 2001) in advance of Scheme construction (undertaken during the 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.
- 6.14.6. An archaeological mitigation strategy would form the basis of future consultation with the DCC archaeologist to develop a final strategy.
- 6.14.7. The construction contractor would produce a Heritage Management Plan (HMP) as based on the Archaeological Mitigation Strategy (AMS), indicating how the historic environment is to be protected in a consistent and integrated manner, coordinated with all other relevant environmental topics. The HMP would be prepared in consultation with the DCC archaeologist and the Derwent Valley Mills World Heritage Site Partnership (DVMWHSP).
- 6.14.8. The AMS and an accompanying Overarching Written Scheme of Investigation (OWSI) would set out the scope, guiding principles and methods for the planning and implementation of essential archaeological mitigation. For each site or area of archaeological interest, a Site Specific Written Scheme(s) of Investigation (SSWSI) would be prepared that outlines specific measures that would apply to particular pieces of archaeological fieldwork, to be carried out as part of the programme of archaeological mitigation works.
- 6.14.9. 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 WHS Research Framework (Knight et al., 2016).
- 6.14.10. Each SSWSI would ensure that research strategies become a visible theme running through the archaeological mitigation and the subsequent reporting stage to demonstrate that they have been the basis for decision making, sample selection and justification for all stages of archaeological mitigation and reporting.
- 6.14.11. The AMS, OWSI and SSWSIs would be prepared and agreed in consultation with the DCC archaeologist prior to preliminary works commencing on site. The advice of Historic England's Regional Scientific Advisor would be sought and incorporated into the design of the documents, where it is appropriate and relevant.
- 6.14.12. The archaeological fieldwork would be closely monitored to ensure that it is carried out to the required standard and to ensure that it would achieve the desired aims and objectives. The DCC archaeologist would be invited to attend site meetings to review the progress and results of the fieldwork. These meetings would also be used to sign-off sites for construction.

- 6.14.13. It is anticipated that the majority of the archaeological fieldwork would be undertaken during the preliminary works stage of the construction programme as Advanced Archaeological Works. However, where site conditions prevent archaeological fieldwork at the preliminary works stage, archaeological fieldwork may be required during the main construction stage. It is anticipated that such circumstances would generally be limited to minor works e.g. within the existing highway boundary.
- 6.14.14. In order to minimise the risk of unexpected finds being made during the course of the main works, Further Archaeological Design (FAD) documents would be prepared, as required, as an addendum to a SSWSI, in consultation with the DCC archaeologist.
- 6.14.15. The archaeological mitigation works and reporting would be undertaken by a suitably qualified, experienced and capable archaeological contractor.
- 6.14.16. During both the preliminary works stage and the construction stage, procedures would be adopted as per the OEMP (refer to Appendix 2.1 [TR010022/APP/6.3]) to ensure that sites and areas of archaeological interest are protected. Toolbox talks would be undertaken when necessary to inform construction supervision staff and site operatives of sensitive areas.
- 6.14.17. In areas where archaeology or heritage assets are to be preserved *in-situ* (protected by temporary perimeter fencing, or beneath fill materials), method statements would be put in place at the start of the construction programme that describe specific protection measures to be applied to the site or area of interest, and following procedures outlined in the OEMP (refer to Appendix 2.1 [TR010022/APP/6.3]). The method statements would be subject to approval by the DCC archaeologist. The method statements would ensure that sites/areas would be marked out, fenced and protected prior to construction. Measures would be put in place to avoid rutting or the compaction of soft ground unless adequate protection is provided (vehicles would be restricted or prohibited from traversing sensitive areas prior to fencing, the laying of a protective membrane and fill deposits/vehicle running surface, as appropriate).
- 6.14.18. The method statement(s) would set out a suitable methodology for filling areas without disturbing or impacting sensitive archaeological remains. Toolbox talks would be undertaken to inform construction supervision staff and site operatives of procedures within these areas.
- 6.14.19. An allowance for a minimum period of time to deal properly with any unexpected finds during the construction process would be agreed and recorded in the CEMP prepared by the main contractor for the construction stage.

Proposed recording methods and descriptions

- 6.14.20. The following archaeological mitigation actions are proposed for recording archaeological finds, the application of which would be determined in consultation with the DCC archaeologist. Relevant descriptions of proposed mitigation actions are presented in Table 6.10.

Table 6.10: Archaeological mitigation measures

Recording method	Description
Trial trench evaluation (preliminary works stage)	<ul style="list-style-type: none"> In areas where it is not feasible to evaluate prior to public examination, a targeted or sample-based mechanical or hand excavated trench based investigation to record the extent of archaeological remains, including those identified through non-intrusive survey may be appropriate to inform decision making on further mitigation.
Archaeological photographic recording (preliminary works stage)	<ul style="list-style-type: none"> A photographic record combined with a written description of a heritage asset that records its current condition, character, form and type. Depending upon the level of detail required, the photographs may also record views to and from the asset so that there is a record of its setting.
Detailed excavation (preliminary works stage)	<ul style="list-style-type: none"> A programme of controlled, intrusive fieldwork with defined objectives which maps, examines, records and interprets archaeological remains at a site or within a specified area. The records made and the objects and samples gathered during the fieldwork are combined and studied (assessed and if appropriate analysed) and the results published in detail appropriate to the project design. Detailed excavation, which may incorporate extensive sample excavation ('strip and record' or 'strip, map and sample'), trench mitigation or test pit mitigation (with soil sieving and artefact recovery) would be undertaken where significant archaeological remains are either known from assessment or evaluation works. Detailed excavation may be targeted at specific sites, areas of interest or a sample range of locations. The extent of the investigation and the excavation strategy for each detailed excavation area would be agreed in consultation with the DCC archaeologist.
Geo-archaeological Investigation (preliminary and main construction stages)	<ul style="list-style-type: none"> A programme of sample recovery and assessment/analysis undertaken to investigate paleo-environmental conditions and soil sediment development that may be relevant to the research of archaeological sites or remains found within the vicinity. Achieved through trial pit excavations or other soil sample retrieval methods (such as auger or boreholes).
Archaeological measured survey (preliminary and main construction stages)	<ul style="list-style-type: none"> An archaeological site survey undertaken to record the shape and topography of the ground surface, upstanding remains and any relevant components. It would include both a drawn and written record, and depending upon the level of detail that is required it could also include a photographic record. Typically it would be applied to both archaeological remains and features that contribute to the historic landscape character.
Archaeological monitoring (main construction stage)	<ul style="list-style-type: none"> A programme of observation, investigation and recording of archaeological remains undertaken in specific areas where the presence of or low-moderate potential for archaeological remains has been demonstrated or can be predicted, but where detailed investigation prior to the main construction programme is unfeasible due to safety or logistical considerations, or undesirable due to environmental or engineering constraints. The contractors preferred method of working would be controlled as necessary to allow archaeological recording to take place

Recording method	Description
	to the required standard.
Preservation <i>in-situ</i> (main construction stage)	<ul style="list-style-type: none"> An area of development that has been excluded to conserve archaeological remains or buildings and structures of historic interest, thereby preserving it for later generations. Measures for preservation <i>in-situ</i> would include protective fencing, burying/sealing remains beneath fill material to ensure that they are not disturbed (including use of a protective barrier membrane between the existing ground surface and the fill, and control measures for plant movements at construction).

- 6.14.21. Following completion of the archaeological recording work on site, a programme of post-excavation assessment, analysis and reporting would be undertaken, including publication of the results and deposition of the archive in an approved museum.
- 6.14.22. The location and extent of all areas proposed for archaeological mitigation would be determined in consultation with the DCC archaeologist and would be based on the baseline assessment and archaeological evaluation results.
- 6.14.23. The archaeological mitigation programme (recording works for archaeology) would commence as part of the preliminary works and in advance of the start of the main construction works.
- 6.14.24. The exact timing of the mitigation programme would be dependent upon land access requirements under the DCO, prevailing ground conditions and related utility diversions. Mitigation works would be generally programmed as follows:
- Phase 1:** additional non-intrusive surveys would be undertaken to assess the archaeological potential in areas that were unavailable prior to public examination.
 - Phase 2:** trial trench evaluation would be undertaken to investigate selected site areas and to determine the scope of further mitigation works. Topographic surveys, and small-scale investigation of historic landscape features and minor archaeological sites and geo-archaeology investigations would be undertaken. Archaeological mitigation would be carried out during preliminary works such as installation of highway boundary, ecology works and vegetation clearance.
 - Phase 3:** detailed excavation would be undertaken during the preliminary works stage (and prior to construction), at archaeological sites and areas requiring preservation by record. Detailed design works for additional sites that require preservation *in-situ* would be developed and implemented during the preliminary works stage, if appropriate, and maintained throughout the preliminary and construction works.
 - Phase 4:** monitoring works would be undertaken to ensure the preservation *in-situ* of archaeological assets in accordance with the method statements.

- **Phase 5:** post-excavation assessment, analysis, reporting and dissemination. A post-excavation assessment, in accordance with DMRB and Historic England guidelines, followed by an appropriate scheme of detailed analysis and reporting would be undertaken. It would commence as soon as the archaeological mitigation fieldwork has been completed.

- 6.14.25. The post-excavation works could result in both a popular publication(s) and an academic monograph or academic papers presented in an appropriate geographic or topic specific academic journal (which would either be available in hard copy or online).
- 6.14.26. The results of the archaeological fieldwork would be disseminated, by various means, to as wide an audience as possible (local, regional, national).
- 6.14.27. The Scheme archive would be deposited at a local museum for long-term storage and the archive would be made publicly accessible with the museum's agreement. Digital data and digital finds information would also be conserved on a local and/or national web-based server.
- 6.14.28. Media relations would be maintained throughout the archaeological works and relevant details provided to media outlets to inform local communities, the wider general public and the academic community.

6.15. Assessment of likely significant effects

- 6.15.1. The heritage baseline of the study area has been assessed against the Scheme's construction and operation to determine the potential for likely significant effects. Only those heritage assets which have the potential to be affected, either by proximity to the Scheme or through a shared relationship or setting, are considered below. All other heritage assets are considered to be unaffected by the Scheme.
- 6.15.2. The sections below consider temporary construction activities involved in building the Scheme, and the subsequent permanent presence of the Scheme once fully constructed (including operational Scheme use by traffic).
- 6.15.3. The potential for impacts on the setting of Friar Gate Conservation Area (A62), Markeaton Conservation Area (A65), Little Eaton Conservation Area (A64), Darley Abbey Conservation Area (A67) and Allestree Conservation Area (A66) have been considered (refer to Figures 6.2, 6.5 and 6.5 [TR010022/APP/6.2]). The significance of these areas relates to the historic and architectural interest of the area and the contribution made by individual structures and buildings of architectural and historic interest contained within, many of which are listed. The conservation areas focus on the historic core of the settlements and focus on the interrelationship of buildings and the spaces they create within a streetscape context. Many of which have later development in and around the core which add an additional degree of physical and visual separation between them and the Scheme. There is no Scheme development planned within or immediately adjacent to these conservation areas, similarly there is no Scheme development within the setting of these areas. Therefore, the Scheme would not have any impacts upon the significance of these conservation areas or the listed buildings contained within them.

- 6.15.4. The potential for impacts on Leylands Estate Conservation Area (A63) and associated Eborn House (A186) (refer to Figure 6.2 [TR010022/APP/6.2]) have been considered due to the proximity of the assets to the Scheme boundary. The significance of these assets lies in their architectural and historic interest. The setting of the estate adjacent to the existing A38 does not contribute to the significance of the assets. The Scheme in this location proposes changes to signage along the existing A38 which would not result in a change to the setting of the assets. Therefore, the Scheme would not have impacts on the significance of the Leylands Estate Conservation Area or Eborn House.
- 6.15.5. The potential for impacts on Kedleston Hall (A216) and the Registered Park and Garden (A215) and associated listed buildings have been considered (refer to Figure 6.4 [TR010022/APP/6.2]). The Hall is located approximately 3.5km from Markeaton junction and approximately 5km from Little Eaton junction. The Hall lies within a designed landscape surrounded by pleasure grounds and parkland. The setting of the Registered Park and Garden includes agricultural land that surrounds it. The fields immediately around the boundary were historically associated with it. The setting of the Hall is contained by the planting to the south-eastern boundary of Vicar Wood and the Derby Screen. Therefore, the Scheme would not have any impacts on the significance of Kedleston Hall. The setting of the Registered Park and Garden is more extensive and the rural setting makes a positive contribution to its significance. The land associated with the Scheme is located within the urban areas around Derby. Markeaton junction is located to the south-east and is sufficiently distant to be indistinguishable in views from the park due to intervening trees, hedgerows and buildings. Little Eaton junction is located beyond Allestree, and is not visible from the park. Even if the junctions were visible, they would be viewed in the context of the built up area of Allestree, development flanking the A38 and the city of Derby and development in long distance views. The extent of the built up area beyond the park is obvious and extensive, as such the Scheme would not be noticeable and would be within the context of an urban setting. Therefore, the Scheme would not have any impacts on the significance of Kedleston Hall, the Registered Park and Garden and the associated listed buildings.
- 6.15.6. The grade II listed 193 and 195 Ashbourne Road (A31) (refer to Figure 6.1 [TR010022/APP/6.2]) are a pair of modest cottages dating from the early 19th Century. They are the closest designated asset to Markeaton junction, located approximately 75m from the Scheme boundary. The significance of this asset is their architectural and historic interest as a domestic property of the early 19th Century located on one of the principal routes into and out of Derby. The urban setting contributes to the significance of the asset. Even though the Scheme may be visible from the building, this would not affect the ability to understand or appreciate the building's significance or setting. Therefore, the Scheme would not have any impacts on the significance of 193 and 195 Ashbourne Road.
- 6.15.7. The grade II listed 161 Ashbourne Road (A30) (refer to Figure 6.1 [TR010022/APP/6.2]) is the second closest designated asset to Markeaton junction, located approximately 170m south-east of the Scheme boundary on Ashbourne Road. Its significance has been established in its former use as a toll house, its appearance and location adjacent to one of the principal roads into Derby confirm this. Its significance is positively contributed to by its road side

setting. Even though the Scheme may be visible from the building, this would not affect the ability to understand or appreciate the building's significance or setting. Therefore, the Scheme would not have any impacts on the significance of 161 Ashbourne Road.

- 6.15.8. Given the details as presented above, these heritage assets do not require further assessment.

Construction effects: temporary

- 6.15.9. The Scheme impacts on heritage assets are discussed below in narrative form and are summarised in Table 6.11.
- 6.15.10. By definition, loss of archaeological remains is a permanent physical impact and irreversible and therefore no temporary physical impacts are identified for the Scheme (refer to section below on permanent effects).
- 6.15.11. All temporary impacts derive from non-physical impacts of the Scheme. These comprise changes to the setting of heritage assets arising from views of Scheme infrastructure (principally construction compounds, soil storage and haul roads) and from construction plant and traffic. Impacts from associated construction noise are also identified. These impacts are transitory and of varying duration. All would cease by the end of the Scheme construction phase.
- 6.15.12. The main element of the Scheme within the WHS is the requirement for a floodplain compensation area. The Environment Agency Flood map data indicates that Little Eaton junction is located within the extent of the extreme flood outline (namely Flood Zone 2, with the western elements falling within or adjacent to Flood Zone 3 – refer to Chapter 13: Road Drainage and the Water Environment). In order to mitigate the loss of River Derwent floodplain 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 (refer to Chapter 3: Scheme History and Assessment of Alternatives, Table 3.10), 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.
- 6.15.13. The location for the floodplain compensation area is within 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 the land makes to the OUV of the WHS and care has been taken to ensure that its design is natural and mimics the existing topography and contours of the land.

- 6.15.14. As detailed in Section 6.14, the floodplain compensation area 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.
- 6.15.15. Excavation equipment would access the floodplain compensation site direct from the A38. During construction the movement of traffic and materials would mean some temporary non-permanent impacts. However following construction, the floodplain compensation area would be re-seeded and returned to agricultural use, and thus there would be no obvious or discernible change to the way that the area is experienced or understood. The rural character would thus be restored and it would continue to contribute to the OUV of the WHS.
- 6.15.16. 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 (excavation works within the floodplain compensation area estimated to take approximately 10 weeks to complete), the walk from Darley Abbey northwards towards the A38 would be changed due to construction activity both at the Little Eaton junction and within the floodplain compensation area (also refer to Chapter 7: Landscape and Visual). 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.
- 6.15.17. These construction impacts would affect land within the Derwent Valley Mills WHS. However, taking into account the duration of impact and the mitigation measures embedded in the Scheme design, such temporary construction effects would result in a negligible impact, resulting in slight adverse effect (not significant).
- 6.15.18. Much of the Scheme at Little Eaton junction is located 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 new A38 mainline would be approximately 11m above existing ground level at the highest point on the north side of the junction – this 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.

- 6.15.19. These construction impacts would affect the setting of the Derwent Valley Mills WHS. However, taking into account the duration of impact and the mitigation measures embedded in the Scheme design, such temporary construction effects would result in a negligible impact, resulting in slight adverse effect (not significant).
- 6.15.20. Scheme impacts upon the Derwent Valley Mills WHS are further considered in the HIA (refer to Appendix 6.1 [TR010022/APP/6.3]).

Permanent effects (construction and operation)

- 6.15.21. The assessed permanent Scheme effects are described below and summarised in Table 6.11.

Archaeological remains (refer to Figures 6.1 to 6.6 [TR010022/APP/6.2])

- 6.15.22. Permanent adverse impacts for archaeological features are limited to fifteen non-designated assets, one at Kingsway junction (A16), four at Markeaton junction (A5, A10/HDR5524, A39 and A58), and ten at Little Eaton junction (A4, A13, A84, A141, A245, A246, A247, A248, A249 and A296).
- 6.15.23. Of these, one asset is of medium value (A4), six of the assets are of low value (A5, A10/HDR5524, A13, A84, A246, A247); and eight are of negligible value (A16, A39, A58, A141, A245, A248, A249 and A296).
- 6.15.24. With regard to impacts upon these assets, there would be a major impact on one asset (A39), four moderate impacts (A141, A245, A248, A249), six minor impacts (A10/HDR5524, A13, A58, A84, A246, A296), and three negligible impacts (A4, A16, A247). In addition there would be no change to one asset (A5).
- 6.15.25. Taking into account the defined impact levels and the value of the impacted heritage assets, it is assessed that the Scheme would result in a neutral effect on four assets (A5, A16, A141, A296) and slight adverse effects upon eleven other non-designated archaeology assets (A4, A10/HDR5524, A13, A39, A58, A84, A245, A246, A247, A248, A249).
- 6.15.26. Archaeological evaluations that have been undertaken in support of the Scheme heritage assessment (at Little Eaton junction) indicates that the archaeological remains discovered within the Scheme footprint are of negligible to low value. Where these archaeological remains are removed by construction of the Scheme, this would result in a neutral to moderate adverse impact, resulting in a slight adverse effect.

Historic buildings

- 6.15.27. Markeaton Park's (A10/HDR5524) (refer to Figure 6.2 [TR010022/APP/6.2]) significance lies in the historic interest as a landscape that has evolved from being a medieval deer park and medieval village, through to being the centre of a 16th Century estate which evolved into an 18th Century estate complete with a designed parkland and associated features. Its later use during World War II as a military base adds to its historic interest. Its later use as a municipal park is also of interest. The architectural interest of the park relates to the remnants of the 18th Century design landscape and the listed buildings such as the Orangery. The park boundary wall contributes to this and defines the park boundary making a positive contribution to the street scene.

- 6.15.28. The demolition of the disused toilet block at the existing Markeaton Park entrance would result in a positive impact upon the park. The disused toilet block detracts from the setting and experience of Markeaton Park. The loss of the building and the restoration to parkland would be beneficial to the significance of the park and would improve the approach and experience of the park to users.
- 6.15.29. However, construction of the Scheme at Markeaton junction would result in some adverse impacts within the setting of Markeaton Park. The utilities diversion corridor route along the southern section of the park, the replacement footbridge, the loss of the 15 houses along Queensway and the junction alterations including the underpass, would result in alterations within land considered to be within the setting of Markeaton Park. In addition, the Scheme would also reconfigure the park entrance/exit and rearrange some of the park's internal road infrastructure to facilitate a bus turning circle. Ecological mitigation works within Markeaton Park include the creation of a species rich grassland (using topsoils translocated from Kingsway junction) – such works are anticipated to have a beneficial effect upon the setting of park. Whilst the Scheme would result in changes to the park setting, these would not impact on the identified significance of Markeaton Park. Overall, taking into account the beneficial and adverse impacts (and the mitigation measures embedded in the Scheme design), the magnitude of impact is assessed as minor adverse, resulting in a slight adverse effect.
- 6.15.30. Markeaton Park Boundary Wall (A40) (refer to Figure 6.2 [TR010022/APP/6.2]) has been identified as a feature with historic and architectural interest forming an important feature of the streetscape and an important boundary feature of Markeaton Park. The park is an important aspect of the wall's significance. Its road side location is also an important aspect of its significance. Parts of the wall have been altered as part of previous road alterations during the 20th Century which has diminished its historic interest. The new gates (A155) installed in 2017 to articulate the historic park entrance would not be affected by the Scheme, and they would remain *in-situ*, although the utility diversion corridor would bring construction activities close to the structure and thus they would need to be protected during construction.
- 6.15.31. The construction of the Scheme would result in physical alterations to the boundary wall during reconfiguration of the existing park exit into an entrance/exit along the A52 road. Mitigation would be provided by ensuring that the design of the realigned wall is appropriate to its historic and architectural interest and that it is carefully dismantled and rebuilt. The magnitude of impact on the significance of the asset as a whole is considered to be moderate, resulting in a slight adverse effect.
- 6.15.32. Breadsall Conservation Area (A61) is located approximately 500m south-east of Little Eaton junction (refer to Figure 6.5 [TR010022/APP/6.2]). The significance lies in its architectural and historic interest. The area was originally a rural settlement centred on a few historic farmsteads, but evolved during the early 20th Century with ribbon development and infill along the principal routes in and around the village. The existing A38 and A61 are within the rural setting of the conservation area, although external views are limited, whilst noise from the existing roads (including the A38 and the A61) is audible from within the conservation area and forms part of its experience. The setting of the village within farmland contributes to the ability to understand the early farming origins of

the settlement.

- 6.15.33. The construction of the Scheme would result in an impact within the setting of the conservation area (A61). The Scheme would bring the road network closer to the conservation area. The Scheme would mean that the A38 road would pass over two new roundabout bridges on an embankment before continuing to the west of the existing A38 and re-joining the existing A38. The embankment would be a noticeable change within the setting of the conservation area and would increase the opportunities to see it from within the conservation area. However, the Scheme would be appropriately landscaped, provided with noise and visual screening barriers and would not increase noise levels within the conservation area (refer to Chapter 7: Landscape and Visual, and Chapter 9: Noise and Vibration). The magnitude of impact on the significance of Breadsall Conservation Area as a whole is considered to be minor, resulting in a slight adverse effect.
- 6.15.34. The Church of All Saints (A163) is located approximately 500m from the Scheme (refer to Figure 6.5 [TR010022/APP/6.2]). The significance of the church derives from its architectural and historic interest as a rural parish church. The visibility of the spire in long ranging views towards the church set within a rural setting has been identified as contributing to its significance. The construction of the Scheme would result in impacts within the setting of the church. Views towards the church spire have been demonstrated to contribute to the ability to understand the significance of the asset and its role within the parish of Breadsall. The Scheme would obstruct some views of the church spire particularly as the Scheme would require an embankment approximately 11m higher than the existing ground level. This would challenge the dominance of the spire in some views particularly from the north-east. The magnitude of impact on the significance of the asset as a whole is considered to be minor, resulting in a slight adverse effect.
- 6.15.35. Breadsall Manor (A37) is located less than 500m from the Scheme boundary (refer to Figure 6.5 [TR010022/APP/6.2]). The significance of the house is derived from its architectural and historic interest. The rural village setting contributes towards the ability to understand significance. The existing A38 road does not contribute towards its setting or significance, and whilst it is audible, it is not clearly visible from the building. The construction of the Scheme would result in impacts within the setting of the building. The Scheme would bring the A38 road closer to the building, although the noise effect would be negligible (refer to Chapter 9: Noise and Vibration). No lighting columns would be provided on the A38 mainline, and thus adverse impacts from lighting are not anticipated. The magnitude of impact on the significance of the asset as a whole is considered to be minor, resulting in a slight adverse effect.
- 6.15.36. Allestree Hall (A202) is located approximately 1.5km from the Scheme at Little Eaton junction (refer to Figure 6.5 [TR010022/APP/6.2]). The significance of the Hall is derived from its architectural and historic interest as an early 19th Century house once owned by Evans family, the founder of Darley Abbey Mills. Its setting within parkland contributes towards its significance. The park's setting within farmland contributes to its significance. Later housing in Allestree and the maturity of planting has severed any planned or designed views that may have been part of the original design intend. It is located within the buffer zone for the Derwent Valley Mills WHS due to its association with the Evans family, a key

family in the history of the industrial landscape. This association is considered further in the HIA (refer to Appendix 6.1 [TR010022/APP/6.3]).

- 6.15.37. The construction of the Scheme would result in impacts on land with historical association with the Allestree Hall. Given the existing impacts upon the asset resulting from the existing A38 road, the impacts are sufficiently distant enough to not result in any noticeable visual or audible change to the asset or its significance. The magnitude of impact on the significance of the asset as a whole is considered to be negligible, resulting in a slight adverse effect.

Historic landscape

- 6.15.38. The A38 passes through the Derwent Valley Mills WHS (A41) just beyond Little Eaton junction (refer to Figure 6.5 [TR010022/APP/6.2]), where the road crosses the Midland Mainline railway line and the River Derwent on over bridges, through a semi-rural landscape. Kingsway and Markeaton junctions are not within the Derwent Valley Mills WHS, and thus the impacts arising from the Scheme at Little Eaton junction are the focus of the assessment and the accompanying HIA. The impacts upon the WHS as reported below are a summary of those found within the HIA (refer to Appendix 6.1 [TR010022/APP/6.3]).
- 6.15.39. The Scheme would include additional signage within Allestree and on the approach to Little Eaton junction from the north. This would not result in any affects as signage is an expected part of the road network.
- 6.15.40. The existing Little Eaton junction has a slight adverse impact on the OUV of the Derwent Valley Mills WHS. Elements of the Scheme have the potential to introduce additional adverse impacts, whilst there is a potential for the physical loss of archaeological remains. In addition, the Scheme has the potential to change the setting of some attributes and the historic landscape character within the Derwent Valley.
- 6.15.41. The construction of the Scheme would result in impacts on land within the Derwent Valley Mills WHS. In order to provide floodplain compensation, 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 floodplain compensation area. The floodplain has been identified as an attribute that conveys the OUVs of the Derwent Valley Mills WHS. The natural landform of the floodplain would be altered, but care has been taken to ensure that appropriate land forming would be undertaken to create a natural profile to blend it back into the existing farming landscape.
- 6.15.42. 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 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, with the closed road being landscaped and provided with facilities for cyclists and walkers. The widening of the existing bridges would have little discernible visual impact. There would also

be widened embankments within the WHS, however, this would bring little visual change to the existing baseline.

- 6.15.43. 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 and a change to the setting of the WHS. Once constructed, the landscaping as part of the embedded design would reintroduce screening and reduce the visual impact. Given the extent and the scale of the WHS, as a whole, the Scheme would have a negligible impact upon the landscape setting of the WHS.
- 6.15.44. The magnitude of impact on the significance and OUV of the Derwent Valley Mills WHS as a whole is considered to be negligible, resulting in a slight adverse effect.
- 6.15.45. A number of character areas defined by the Derbyshire Historic Landscape Character Assessment that have already been impacted by the construction of the A38 trunk road and which have resulted in modern boundary loss would be affected by the Scheme. Permanent adverse impacts at Kingsway and Markeaton junctions would affect three historic landscape character types that are of low value (HDR5781) or negligible value (HDR5785 and HDR766 (at two locations)) (refer to Figure 6.8 [TR010022/APP/6.2]). There would be a major impact on one historic landscape character type (HDR5781), one minor impact (HDR5785) (HDR5524 assessed as archaeology with asset A10) and a negligible impact on one (HDR766). Taking into account the defined impact levels and the value of the impacted historic landscape character types, it is assessed that the Scheme would result in one neutral effect (HDR766) and two slight adverse effects (HDR5781, HDR5785).
- 6.15.46. At Little Eaton junction there would be one slight beneficial effect on one historic landscape character type (HDR3159) (refer to Figure 6.9 [TR010022/APP/6.2]) as a result of the closing of the existing Ford Lane access onto the A38 where downgrading works would restore the character in this area. Elsewhere there would be neutral effects on four historic landscape types that are of negligible value (HDR6211, HDR6208, HDR3473, HDR3478), and a slight adverse effect on two others (HDR3154, HDR3158) that are of low and negligible value respectively.

6.16. Monitoring

- 6.16.1. No significant cultural heritage effects are predicted. On that basis, no monitoring of significant effects are proposed.
- 6.16.2. However, as indicated in Section 6.14, during the preliminary works stage (and prior to construction), there would be a programme of additional non-intrusive surveys to assess the archaeological potential in areas that were unavailable prior to public examination; trial trench evaluation, topographic surveys, and small-scale investigation of historic landscape features and minor archaeological sites and geo-archaeological investigations; detailed excavation works; whilst during the works there would be monitoring undertaken to ensure the preservation *in-situ* of archaeological assets. Such monitoring requirements would be detailed in the contractor's HMP as based upon the AMS (refer to the

OEMP in Appendix 2.1 [TR010022/APP/6.3]).

6.17. Summary of assessment

6.17.1. The cultural heritage assessment key findings are summarised in Table 6.11 which indicate that:

- The effect of the Scheme on the overall OUV of the Derwent Valley Mills WHS (A41), 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).
- There would be neutral or slight adverse effects on fifteen archaeology assets that are all non-designated.
- There would be neutral or slight adverse effects on six historic building assets, including four that are designated: Breadsall Manor (A37), Breadsall Conservation Area (A61), Church of All Saints (A163) and Allestree Hall (A202).
- There would be neutral or slight adverse effects on nine historic landscape character types that are all non-designated, and a beneficial effect on one that is also non-designated.

6.17.2. Table 6.11 indicates that the Scheme is not anticipated to have any potentially significant cultural heritage effects.

Table 6.11: Cultural heritage - summary of effects (refer to Figures 6.1 to 6.6 and Figures 6.8 to 6.9 [TR010022/APP/6.2])

Asset	Name and description	Asset value	Impact description	Design and mitigation measures	Impact magnitude	Residual effect
A4	Palaeo-environmental deposits along River Derwent floodplain (Little Eaton junction)	Medium	Excavation of the floodplain compensation area at Little Eaton junction and the associated site working area has the potential to impact on unknown palaeo-environmental remains.	Archaeological investigation in advance of construction; potentially preservation <i>in-situ</i> design if the resource is lower than the floodplain compensation area or on the associated working area.	Negligible	Slight adverse
A5	Possible route of a Roman road through Derby that joins the forts at Rocester, Derby and Broxtowe.	Low	The creation of a new species rich grassland in Markeaton Park which would require excavation of existing topsoil to a depth of approximately 0.50m has the potential to impact the Roman road if it is present.	Archaeological investigation in advance of construction. If sensitive remains are discovered during evaluation, the location of the species rich grassland would be amended within the Scheme boundary to avoid impacts on the asset.	No change	Neutral
A10, HDR 5524	Markeaton Park, Markeaton, Derby (driveway off the Ashbourne Road). HLC Type 'Parks & gardens' (HLC Area 'Post-medieval & Modern ornamental parkland & recreational')	Low	The corridor for utility diversions at Markeaton Park would impact the original post-medieval driveway off Ashbourne Road into Markeaton Park, if buried remains survive. The replacement footpath, loss of houses along Queensway, and junction alterations would also result in changes to the setting of the asset and therefore the historic landscape character. Ecological mitigation works includes creation of species rich grassland for ecological mitigation purposes.	Archaeological investigation in advance of utility diversions.	Minor	Slight adverse

Asset	Name and description	Asset value	Impact description	Design and mitigation measures	Impact magnitude	Residual effect
A13	Derby Canal, Little Eaton branch	Low	<p>The construction of ecology ponds and highway runoff attenuation 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 footings of a demolished stone footbridge over the canal.</p> <p>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).</p>	<p>Temporary bridge over canal at the construction compound 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.</p> <p>Archaeological investigation in advance of construction. Design for preservation <i>in-situ</i>.</p>	Minor	Slight adverse
A16	Derbyshire & North Staffordshire Extension (dismantled), Great Northern Railway	Negligible	Construction of the embankment for the northbound diverge slip road onto Kingsway junction west dumb bell roundabout would impact the remains of the dismantled railway line.	Archaeological investigation in advance of or during construction.	Negligible	Neutral
A37	Breadsall Manor	Medium	The Scheme would bring the road closer to the building.	Landscaping and noise/visual screening barriers along the southbound diverge slip road would provide appropriate screening and noise mitigation.	Minor	Slight adverse

Asset	Name and description	Asset value	Impact description	Design and mitigation measures	Impact magnitude	Residual effect
A39	Site of lodge at Markeaton Park south entrance	Negligible	Re-location of the existing park boundary wall at Markeaton Park further into the park has the potential to impact upon the remains of the demolished lodge, if buried remains survive. The corridor for utility diversions at Markeaton Park would impact the remains of the lodge, if buried remains survive.	Archaeological investigation in advance of or during construction and utility diversions.	Major	Slight adverse
A40	Markeaton Park Boundary Wall	Low	Reconfiguration of the existing park exit would require the dismantling and rebuilding of the wall.	Archaeological photographic recording of the existing wall; appropriate sympathetic design of the re-aligned wall. Parts of the boundary wall that are to be retained that are close to construction activities would be protected by fencing.	Moderate	Slight adverse
A41	Derwent Valley Mills World Heritage Site	Very High	Potential to change the setting of some attributes and the historic landscape character within the Derwent Valley. At the floodplain compensation area the existing edge of the floodplain would be extended by excavation to form a natural landform profile. The raising of the Scheme on embankment above the existing carriageway would introduce additional urbanising features into the landscape.	The floodplain compensation area would be reinstated to blend into its existing character and returned for continued agricultural use. The embedded design would introduce landscape screening to reduce visual impacts.	Negligible	Slight adverse

Asset	Name and description	Asset value	Impact description	Design and mitigation measures	Impact magnitude	Residual effect
A58	Site of WW2 Army Camp at Markeaton Park	Negligible	The corridor for utility diversions at Markeaton Park would impact a number of demolished military buildings/structures of WW2 date, if buried remains survive.	Archaeological investigation in advance of utility diversions.	Minor	Slight adverse
A61	Breadsall Conservation Area	Medium	The road network would be brought closer to the conservation area and would increase the opportunity of seeing it.	Landscaping would provide appropriate visual screening.	Minor	Slight adverse
A84	Roman Road ('The Street') (conjectural route of), Buxton to Derby, High Peak and Derbyshire Dales	Low	The haul road to the floodplain compensation area to North Avenue, Abbey Park, including a new length of haul road to connect to North Avenue, crosses the conjectured line of the Roman road, if buried remains survive.	Archaeological investigation in advance of or during construction. Haul road to the floodplain compensation area not anticipated to be widened or altered.	Minor	Slight adverse
A141	Earthwork Hollow, Holme Nook, Derby	Negligible	The excavation of the floodplain compensation area at Little Eaton junction (south of the A38 on the western bank of the River Derwent) and the associated site working area would impact upon the earthwork hollow which is likely to be a fluvial feature (infilled tributary of the river Derwent).	None	Moderate	Slight adverse

Asset	Name and description	Asset value	Impact description	Design and mitigation measures	Impact magnitude	Residual effect
A155	Renovated park gates and pillars at Markeaton Park	Low	The utilities diversion corridor would bring construction activities close to the recently installed park gates and pillars.	Protective fencing to ensure that the gates and pillars are not damaged during construction activities	No change	Neutral
A163	Church of All Saints, Church Lane, Breadsall	High	The Scheme would obstruct some views of the church spire.	No mitigation proposed.	Minor	Slight adverse
A202	Allestree Hall	High	At Little Eaton junction the land required for the Scheme has historic associations with the Hall.	No mitigation proposed.	Negligible	Slight adverse
A245	Poorly preserved buried remains of medieval furrows from ridge and furrow cultivation and a post-medieval ditch	Negligible	The construction of the Scheme mainline at Little Eaton junction, the construction of ecology ponds and highway runoff attenuation ponds, the re-alignment of Dam Brook, the topsoil stripping for the temporary soil storage area at Little Eaton junction, including heavy plant bringing in soil for storage would impact upon the buried remains of the furrows.	Archaeological investigation in advance of construction.	Moderate	Slight adverse
A246	Upstanding earthwork and buried remains of medieval ridge and furrow cultivation	Low	The construction of the re-aligned watercourses at Little Eaton junction (Dam Brook) would impact on the remains.	Archaeological investigation in advance of construction.	Minor	Slight adverse

Asset	Name and description	Asset value	Impact description	Design and mitigation measures	Impact magnitude	Residual effect
A247	Earthwork remains of a possible hollow way that is visible on LiDAR	Low	The construction of the Scheme mainline at Little Eaton junction and the requirement for a haul road next to the southbound merge slip road would impact upon the possibly disturbed remains of the possible hollow way.	Archaeological investigation in advance of or during construction.	Negligible	Slight adverse
A248	Feint earthwork remains of ridge and furrow cultivation that has been detected by LiDAR	Negligible	The construction of the new embankment for the southbound merge slip road at Little Eaton junction, and the associated working area would impact upon the archaeological remains.	Archaeological investigation in advance of construction.	Moderate	Slight adverse
A249	Poorly preserved buried remains of medieval furrows	Negligible	The construction of the new embankment for the southbound diverge slip road at Little Eaton junction would impact upon the archaeological remains.	Archaeological investigation in advance of construction.	Moderate	Slight adverse
A296	Earthwork remains of a ditch recorded by LiDAR and also during topographic survey in 2019.	Negligible	Construction of the Dam Brook realignment close to the A61 would impact upon the earthwork remains.	None	Minor	Neutral
HDR 766	HLC Type 'Post-1880s Settlement' (HLC Area 'Post-medieval & Modern settlement')	Negligible	Construction of the Markeaton junction southbound diverge slip road would result in some loss of land. The use of the rest of the area for temporary soil storage would have a negligible impact on the historic landscape character. Construction of the Kingsway Park Close Link road would have an impact	Land left vacant at Queensway would be restored as public open space, appropriately landscaped and provided with facilities for pedestrians and cyclists.	Negligible	Neutral

Asset	Name and description	Asset value	Impact description	Design and mitigation measures	Impact magnitude	Residual effect
			on an area characterised by modern light industrial business units that has no historic depth.			
HDR 5781	HLC Type 'Small irregular fields' (HLC Area 'Post-medieval & Modern fields and enclosed land')	Low	Construction of the flood storage areas adjacent to Bramble Brook would result in loss of historic landscape character.	None	Major	Slight adverse
HDR 5785	HLC Type 'Other Parkland' (HLC Area 'Post-medieval & Modern ornamental parkland & recreational')	Negligible	Construction of a buried attenuation tank on the edge of Mackworth Park would result in loss of some historic landscape character.	None	Minor	Slight adverse
HDR 6211	HLC Type 'Large irregular fields' (HLC Area 'Medieval, Post-medieval & Modern fields and enclosed land')	Negligible	Construction of the southbound diverge slip road at Little Eaton junction would result in further boundary loss to hedgerows that are post-medieval to modern in date.	Replacement landscape planting.	Negligible	Neutral
HDR 6208	HLC Type 'Modern plantation west of Breadsall' (HLC Area 'Historic woodland')	Negligible	Construction of the southbound diverge slip road at Little Eaton junction would result in an impact on the modern plantation.	Replacement landscape planting.	Negligible	Neutral
HDR 3154	HLC Type 'Planned enclosure containing ridge and furrow' (HLC Area 'Medieval, Post-medieval & Modern fields and enclosed land')	Low	Construction of the Scheme mainline at Little Eaton junction, the construction of ecology ponds, highway runoff attenuation basins, the re-alignment of Dam Brook, and the temporary use of part of the area for soil storage would result in boundary	Replacement landscape planting.	Moderate	Slight adverse

Asset	Name and description	Asset value	Impact description	Design and mitigation measures	Impact magnitude	Residual effect
			loss to hedgerows that are post-medieval in date, and the loss of ridge and furrow earthworks.			
HDR 3158	HLC Type 'Very large post-war fields' (HLC Area 'Medieval, Post-medieval & Modern fields and enclosed land')	Negligible	Excavation of the floodplain compensation area at Little Eaton junction and topsoil stripping for the adjacent site working area would impact the historic landscape character along the River Derwent floodplain.	Floodplain compensation area would be re-profiled and grassed over to blend into the existing topography and landscape, and returned to agricultural use.	Minor	Slight adverse
HDR 3159	HLC Type 'Small irregular fields' (HLC Area 'Medieval, Post-medieval & Modern fields and enclosed land')	Negligible	Closing the Ford Lane access onto the A38 would provide an opportunity to reinstate historic landscape character in this area to better reflect the historic layout of fields.	Landscape planting and provision of facilities for pedestrians and cyclists.	Minor	Slight beneficial
HDR 3473	HLC Type 'Land south of Little Eaton Junction' (HLC 'Modern Industrial, Civic and Commercial')	Negligible	The temporary use of the area for a construction site compound would have a negligible impact on the historic landscape character that is a former refuse tip.	Land to be returned following applicable restoration works.	No change	Neutral
HDR 3478	HLC Type 'Small irregular fields' (HLC Area 'Medieval, Post-medieval & Modern fields and enclosed land')	Negligible	The temporary use of part of the field for a construction site compound would result in boundary loss along a modern hedgerow.	Replacement landscape planting.	Negligible	Neutral

6.18. References

- Barnatt et al. (2000) Derbyshire County Council Historic Landscape Character Assessment. Available at:
http://archaeologydataservice.ac.uk/archives/view/derbyshire_hlc_2016/downloads.cfm.
- Bigsby R (1854) Historical and topographical description of Repton, in the county of Derby.
- Blues, S (2019) An Archaeological Evaluation on Land Near the A38 Derby Junctions, Derbyshire. ARS Ltd Report 2019/12.
- Department for Transport (2014) National Policy Statement for National Networks. The Statutory Office. Available at:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/387222/npsnn-print.pdf
- Derbyshire County Council (2014) The Derwent Valley. The Valley that changed the World. Derwent Valley Mills World Heritage Site Management Plan 2014-2019. Available at:
https://www.derwentvalleymills.org/wp-content/uploads/2014/12/DVM_WHS_Management_MgmtPlanPDF.pdf
- Derbyshire County Council (2016) Derbyshire Historic Landscape Characterisation. Available at
https://archaeologydataservice.ac.uk/archives/view/derbyshire_hlc_2016/
- Derby City Council (2017a) Derby City Local Plans Part 1 Core Strategy (2017), Core Principles: Heritage, CP20 – Historic Environment. Available at
https://www.derby.gov.uk/media/derbycitycouncil/contentassets/documents/policiesandguidance/planning/Core%20Strategy_ADOPTED_DEC%202016_V3_WEB.pdf
- Derby City Council (2017b) City of Derby Local Plan Review. Adopted Plan. Available at:
https://www.derby.gov.uk/media/derbycitycouncil/contentassets/documents/policiesandguidance/planning/CDLPR_2017.pdf
- Dobinson CS (1996) Twentieth Century fortifications in England, Volume 1. Anti-aircraft artillery: England's air defence gunsites, 1911-46.
- Durkin R (2016) Geophysical Survey of Land at A38 Derby Junctions, Derbyshire. ARS Ltd Report 2016/67 (unpublished Archaeological Research Services Report Ltd).
- Durkin R (2018) Geophysical Survey of Land at A38 Derby Junctions, Derbyshire. ARS Ltd Report 2018/178.
- Erewash Borough Council (2014a) Erewash Core Strategy, Adopted March 2014. Available at:

https://www.erewash.gov.uk/media/files/Final_Core_Strategy_-_Version_for_Website.pdf

Erewash Borough Council (2014b) Erewash Borough Local Plan Saved Policies 2005 (Amended 2014). Available at:

https://www.erewash.gov.uk/media/files/Erewash_Local_Plan_Saved_Policies_2005_amended_2014_v2.pdf

Farnsworth D (2006) A History of Markeaton and Mackworth From Mercia to Clark-Maxwell.

Farnsworth A (2003) A Roman Road between Darley Park and Duffield, on the West Bank of the Derwent (unpublished report).

Forrester D (2008) Archaeological Trial Trenching at Ashbourne Road, Derby, Derbyshire (unpublished report prepared by Stoke-on-Trent Archaeology).

Fowkes D ed. (2005) Derbyshire Industrial Archaeology: Gazetteer of Sites, Part II, Borough of Erewash (second edition).

Green D and Full L (2018) A38 Derby Junctions. Ground Investigation Report (Stage Approval). Report No: HE514503-ACM-VGT-A38_SW_PR_ZZ-RP-GE-001 P05S4. March 2018.

Hadfield C (1970) The Canals of the East Midlands. David & Charles.

Highways Agency (2001) Design Manual for Roads and Bridges, Volume 10 Environmental Design and Management, Section 6 Archaeology, Part 1, HA 75/01, Trunk Roads and Archaeological Mitigation. Available at: <http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol10/section6/ha7501.pdf>

Highways Agency (2007a) Design Manual for Roads and Bridges, Volume 11 Environmental Assessment, Section 3, Part 2, HA 208/07, Cultural Heritage. Available at: <http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol11/section3/ha20807.pdf>

Highways Agency (2007b) Assessing the Effect of Road Schemes on Historic Landscape Character. Available at:

<https://historicengland.org.uk/images-books/publications/assessing-the-effect-of-road-schemes-on-historic-landscape-character/>

Highways Agency (2008) Design Manual for Roads and Bridges, Volume 11 Environmental Assessment, Section 2, Part 5, HA205/08, Assessment and Management of Environmental Effects. Available at: <http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol11/section2/ha20508.pdf>

Highways England (2018) A38 Derby Junctions Ground Investigation Report (Stage Approval). HA GDMS No. 30092. Report Number: HE514503-ACM-VGT-A38_SW_PR_ZZ-RP-GE-0001 P05 S4, March 2018.

Highways England (2018) A38 Derby Junctions – Environmental Impact Assessment Scoping Report.

<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/TR010022/TR010022-000036-38DY%20-%20Scoping%20Report.pdf>

Highways England (2018) A38 Derby Junctions – Preliminary Environmental Information Report

https://highwaysengland.citizenspace.com/he/a38-derby-junctions-statutory-consultation/supporting_documents/A38%20Derby%20Junctions%20%20Preliminary%20Environmental%20Information%20Report%20PEIR.pdf

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

<https://historicengland.org.uk/images-books/publications/gpa2-managing-significance-in-decision-taking/> Historic England (2017) Historic

Environment Good Practice Advice in Planning Note 3. The Setting of Heritage Assets. Historic England, second edition, December 2017.

Available at:

<https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/>

Hogg I (2009) Staff Car Park, Derby City General Hospital, Northmead Drive, Derby. An Archaeological Watching Brief Report (unpublished report prepared by AOC Archaeology).

ICOMOS (2011) Guidance on Heritage Impact Assessments for Cultural World Heritage Properties. Paris: International Council on Monuments and Sites, January 2011. Available at:

https://www.icomos.org/world_heritage/HIA_20110201.pdf

Joyce S (2013) Kingsway Hospital, Derby. Archaeological Evaluation (Area 1) (unpublished report prepared by Cotswold Archaeology).

Joyce S (2014) Kingsway Hospital, Derby (Development Phase 2), Derby – archaeological evaluation (unpublished report prepared by Cotswold Archaeology).

Knight D (ed.) (2016) The Derwent Valley. The Valley that changed the World. Derwent Valley Mills World Heritage Site Research Framework. The Derwent Valley Mills Partnership. Available at:

<http://www.derwentvalleymills.org/wp-content/uploads/2016/09/DVMWHS-Research-Framework.pdf>

Knight D, Vyner B and Allen C (2012) An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands. Available at:

<https://historicengland.org.uk/images-books/publications/east-midlands-heritage/>

McLellan, E (2016) A Geoarchaeological Assessment from Borehole Survey at the A38 Derby Junctions. ARS Ltd Report 2016/103 (unpublished Archaeological Research Services Report Ltd).

Ministry of Housing, Communities and Local Government (2019) National Planning Policy Framework (NPPF). Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

Ministry of Housing, Communities and Local Government (2018b) Planning Practice Guidance – Conserving and enhancing the historic environment. Available at <https://www.gov.uk/government/collections/planning-practice-guidance>

Mora-Ottomano A (2015) North Avenue, Darley Abbey. Derbyshire, archaeological evaluation (unpublished ARS archaeological evaluation report).

Morgan A and Cowie D (2012) Markeaton Park Managements and Maintenance Plan. Heritage Lottery fund Round 2. Parks for People. Report prepared by Leisure Facilities, Derby City Council.

Mundy FNC (1830) Needwood forest, and The fall of Needwood: with other poems.

Natural England (2014) National Character Area profile: 50. Derbyshire Peak Fringe and Lower Derwent. Available at:

<http://publications.naturalengland.org.uk/publication/5048261324832768>

Natural England (2012) National Character Area profile: 68. Needwood & South Derbyshire Claylands. Available at:

<http://publications.naturalengland.org.uk/publication/4492587>

Nixon F (1969) The Industrial Archaeology of Derbyshire.

Parker T (2016) Archaeological Evaluation on Land at A38 Derby Junctions, Little Eaton, Derbyshire. ARS Ltd Report 2016/95 (unpublished Archaeological Research Services Report Ltd).

Parker L (2019) A Geoarchaeological Assessment at A38/A61 Little Eaton Junction. ARS Ltd Report 2018/178.

Parker T (2019) An Archaeological Earthworks Survey on Land off Croft Lane, Breadsall, Derbyshire. ARS Ltd Report 2019/11

Ripley D (1971) The Little Eaton Gangway, (First Edition).

Smith ME (1980) The Derby Canal. Ilkeston: Moorley's Bible and Bookshop.

Spur G (2017) A38 Derby Junctions, Little Eaton Junction, Derbyshire. County of Derbyshire. Geotechnical watching brief and deposit modelling report (unpublished MOLA Report).

UNESCO (2010) Adoption of retrospective Statements of Outstanding Universal Value. Derwent Valley Mills. WHC-10/34.com/8E.Add. Thirty-fourth Session, Brasilia, Brazil, 25 July-3 August 2010: World Heritage Committee. United Nations Educational, Scientific and Cultural Organization. Available at: <http://whc.unesco.org/archive/2010/whc10-34com-8E.Adde.pdf>

UNESCO (1972) Convention Concerning the Protection of the World Cultural and Natural Heritage. 17th Session of the UNESCO General Conference, United Nations Educational, Scientific and Cultural Organization. Available at:

<https://whc.unesco.org/en/conventiontext/>

Highways England (2015) A38 Derby Junctions Improvements. Preliminary Sources Study. Report No: 47071319-URS-08-RP-GE-003. 2015.

Webb A (2012) Geophysical Survey, Manor Kingsway Hospital (unpublished report prepared by West Yorkshire Archaeological Service).

White F & Co. (1857) History, Gazetteer & Directory of the County of Derby.