East Midlands Gateway Phase 2 (EMG2)

Document DCO 6.12/MCO 6.12 ENVIRONMENTAL STATEMENT

Volume 1 Main Statement

Chapter 12

Cultural Heritage

July 2025

The East Midlands Gateway Phase 2 and Highway Order 202X and The East Midlands Gateway Rail Freight and Highway (Amendment) Order 202X



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12. Cultural Heritage

12.1. Introduction

12.1.1. This Chapter considers the potential environmental effects of the **EMG2 Project**, as described in full in **Chapter 3: Project Description** (**Document DCO 6.3/MCO 6.3**), upon cultural heritage assets. In brief the **EMG2 Project** comprises three main components as follows:

Main Component	Details	Works Nos.		
DCO Application				
EMG2 Works	Logistics and advanced manufacturing development located on the EMG2 Main Site south of East Midlands Airport and the A453, and west of the M1 motorway. Together with an upgrade to the EMG1 substation and provision of a community park.	DCO Works Nos. 1 to 5 as described in the draft DCO. DCO Works Nos. 20 and 21 as described in the draft DCO.		
Highway Works	Works to the highway network: the A453 EMG2 access junction works; significant improvements at Junction 24 of the M1 (referred to as the J24 Improvements) and works to the wider highway network including active travel works.	DCO Works Nos. 6 to 19 as described in the draft DCO.		
MCO Application	MCO Application			
EMG1 Works	Additional warehousing development on Plot 16 together with works to increase the permitted height of the cranes at the EMG1 rail-freight terminal, improvements to the public transport interchange, site management building and the EMG1 access works.	MCO Works Nos. 3A, 3B, 5A, 5B, 5C, 6A and 8A in the draft MCO.		

- 12.1.2. This Chapter summarises relevant legislation, policy and guidance and describes the methods used to gather baseline information and assess effects. It then presents a summary of the currently available baseline based on built heritage and archaeological information. This includes an assessment of the potential built heritage impacts, and an assessment of previously unrecorded archaeological remains present, drawing upon a Desk Based Assessment and the results of a detailed programme of archaeological evaluation in relation to the EMG2 Works provided within Appendices 12A-F (Document DCO 6.12A-F/MCO 6.12A-F). A detailed programme of archaeological evaluation was undertaken in association with the EMG1 Works and will be referred to where appropriate.
- 12.1.3. The potential effects of the **EMG2 Project** upon the significance of heritage assets as a result of physical loss or change in their setting during the construction and post construction phases are assessed for the DCO Application and MCO Application separately and in combination, and mitigation measures are proposed as appropriate. Residual effects following the implementation of mitigation measures are then assessed in respect of each application separately and for the

EMG2 Project in combination. An assessment of the cumulative effects of the **EMG2 Project** with other development has also been completed. A summary of the effect and their significance is provided in the summary and conclusions section at the end of this chapter.

12.2. Scope and Methodology of the Assessment

Methodology for Establishing Baseline Conditions

- 12.2.1. Baseline conditions have been established through a series of studies comprising the following technical appendices:
 - Built Heritage Assessment of the EMG2 Project (Appendix 12A Document DCO 6.12A/MCO 6.12A)
 - Archaeological Desk-Based Assessment of the EMG2 Project (Appendix 12B Document DCO 6.12B/MCO 6.12B)
 - Geophysical Survey Report of the EMG2 Works (Appendix 12C Document DCO 6.12C/MCO 6.12C)
 - Geoarchaeological Report of the EMG2 Works (Appendix 12D Document DCO 6.12D/MCO 6.12D)
 - Fieldwalking Report of the EMG2 Works (Appendix 12E Document DCO 6.12E/MCO 6.12E)
 - Trial Trenching Report of the EMG2 Works (Appendix 12F Document DCO 6.12F/MCO 6.12F)
 - Heritage Receptors for the EMG2 Project (Appendix 12G Document DCO 6.12G/MCO 6.12G)

12.2.2. The Built Heritage Assessment and Desk-Based Assessment drew upon the following sources:

- Geological and topographical information.
- Data from a 2km radius from the **EMG2 Project** held on the Leicestershire Historic Environment Record and National Heritage List for England.
- Historic map and documentary evidence.
- Online resources (Google Earth and Old Maps): background information.
- Site visits and walkover surveys: confirmation of known assets, identification of additional assets, consideration of setting issues for assets in surrounding area.
- 12.2.3. A Built Heritage Assessment, provided as Appendix 12A (Document DCO 6.12A/MCO 6.12A) was completed in January 2025. This report was undertaken to identify those built heritage receptors potentially affected by the EMG2 Project, assess their importance and sensitivity,

assess the significance of any effects to this importance and identify suitable mitigation measures to be included in the design and master planning process.

12.2.4. The Archaeological Desk-Based Assessment, provided as Appendix 12B (Document DCO 6.12B/MCO 6.12B), was completed in January 2025 and was undertaken to identify those archaeological receptors potentially affected by the EMG2 Project. The assessment was completed in accordance with Chartered Institute for Archaeologists' 2020 Standard and Guidance for Historic Environment Desk-Based Assessment.

DCO Application

EMG2 Works

- 12.2.5. The detailed programme of archaeological evaluation associated with the EMG2 Works comprised four distinct elements. The first phase of the evaluation programme consisted of a Geophysical Survey at Appendix 12C (Document DCO 6.12C/MCO 6.12C) which comprised a fluxgate gradiometer survey of all suitable areas.
- 12.2.6. The subsequent programme of geoarchaeological assessment, fieldwalking, and trial trenching were undertaken in immediate parallel to one another on site between September and November 2022. The Geoarchaeological Assessment, provided as Appendix 12D (Document DCO 6.12D/MCO 6.12D), comprised the archaeological monitoring of fourteen selected geotechnical trial pits and boreholes. The Fieldwalking Assessment, detailed in Appendix 12E (Document DCO 6.12E/MCO 6.12E), comprised an archaeological fieldwalking exercise covering eleven fields within the EMG2 Works, principally to the north of Hyam's Lane. The Trial Trenching, provided as Appendix 12F (Document DCO 6.12F) comprised the excavation of 388 evaluation trenches across the full extent of the EMG2 Works. All archaeological fieldwork was undertaken in accordance with a Written Scheme of Investigation which was approved by the Leicestershire County Council Team Manager (Heritage).

Highway Works

12.2.7. Due to the presence of the existing road networks within the Highways Works area, no previous archaeological works have taken place. The exception to this is where the current Highway Works area overlaps with the previous EMG1 DCO area. The only concentration of features of archaeological interest found in this area of overlap was a possible Romano-British enclosure located approximately 50m to the southwest of Junction 24, detailed within Appendix 12B (Document DCO 6.12B/MCO 6.12B). This is also discussed further at Paragraph 12.2.10 of this Chapter.

MCO Application

EMG1 Works

12.2.8. In relation to the EMG1 Works area, as part of the process for securing consent and delivering the EMG1 DCO, a detailed programme of archaeological investigation was undertaken between July 2014 and September 2017. A programme of geophysical survey was undertaken across the majority of the EMG1 Works area with the survey recording the presence of anomalies of likely, probable and possible archaeological interest. A programme of archaeological fieldwalking was also undertaken within multiple fields recovering material dating from the 16th

century onwards, which was also supported by a LiDAR survey identifying the presence of former field boundaries and areas of ridge and furrow within the western part of the **EMG1 Works** area. The geophysical survey and fieldwalking informed a subsequent programme of trial trenching across the **EMG1 Works** area, undertaken in multiple phases (**Appendix 12B** (**Document DCO 6.12B/MCO 6.12B**)).

- 12.2.9. Informed by the trial trenching, between December 2016 and September 2017, an extensive programme of archaeological mitigation was undertaken at the EMG1 site in the form of 14 separate open excavation areas. The earliest evidence of human activity consisted of worked flints potentially dating to the Mesolithic or Early Neolithic periods. The majority of the excavation areas show signs of activity associated with the Iron Age, with recorded features consisting of pit alignments, roundhouse ring gullies, enclosure ditches and field system remains. At least six discrete enclosures were discovered across the landscape, with field boundaries of Iron Age date recorded at a number of the other sites. Three of the excavation areas show signs of field system (Appendix 12B (Document DCO 6.12B/MCO 6.12B)).
- 12.2.10. Archaeological mitigation at EMG1 also took the form of preservation *in-situ*. It was agreed that two groups of archaeological features would be preserved *in-situ* under the proposed landscape bund bounding EMG1 to the north and west. These features consisted of ditches and possible enclosures dating to the Iron Age referred to as Site A and Site B located within the EMG1 Works area. A third group of archaeological features in the eastern part of EMG1 located in Field 40 adjacent to the M1 motorway had been incorporated within the agreed programme of archaeological excavation, although it was ultimately determined that development would not need to take place in this location. As such, the archaeological features in this location consisting of possible Iron Age enclosures were retained *in-situ* (Appendix 12B (Document DCO 6.12B/MCO 6.12B)).

Significance Criteria

12.2.11. The following section expands on the general significance criteria guidance set out within **Chapter 1: Introduction** to this ES (**Document DCO 6.1/MCO 6.1**), with specific reference to heritage. The criteria have been used to establish the sensitivity of receptors, magnitude of impact and significance of effect.

Sensitivity

12.2.12. The sensitivity of heritage assets to impacts depends on factors such as the condition of the asset and its perceived heritage value and importance. The sensitivity of the receptor (the heritage asset) is defined by its importance in terms of national, regional or local statutory or non-statutory protection and grading of the asset, as well as its condition. A degree of professional judgement is exercised in determining the sensitivity of some assets. Table 12.1 below presents the criteria used in determining the sensitivity of heritage assets to impacts.

Sensitivity	Definition		
High	World Heritage Sites		
	Ancient monuments scheduled under the Ancient Monuments and Archaeological Areas Act 1979, or archaeological sites and remains of comparable quality, assessed with reference to the SoS's non-statutory criteria;		
	Scheduled Monuments with standing remains;		
	Grade I and II* Listed Buildings;		
	Grade II listed building containing elements or fabric of high importance;		
	Conservation Areas containing very important buildings;		
	Undesignated buildings, structures or assets that can be shown to have exceptional qualities in their fabric or historical associations and are of clear national importance; and		
	Undesignated assets of schedulable quality and importance.		
Moderate	Archaeological sites and remains which, while not of national importance, score well against most of the SoS's criteria;		
	Grade II listed buildings;		
	Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historical associations;		
	Conservation Areas containing buildings that contribute significantly to its historic character; and		
	Historic Townscape or built-up areas with important historic integrity in their buildings; or		
	Built settings (e.g. including street furniture, surfaces and other structures).		
Low	Archaeological sites that score less well against the SoS's criteria;		
	'Locally Listed' buildings (identified by plan makers as non-designated heritage receptors);		
	Historic (unlisted) buildings of modest quality in their fabric or historical association (potentially identified as non-designated heritage receptors);		
	Historic Townscape or built-up areas of limited historic integrity in their buildings, or built settings (e.g. including street furniture, surfaces and other structures).		
No Importance	Areas in which investigative techniques have produced no or only minimal evidence for archaeological remains, or where previous large-scale disturbance or removal of deposits can be demonstrated;		
	Buildings of no architectural or historical note.		

Table 12.1: Methodology for Determining Sensitivity

Magnitude of impact

12.2.13. Impacts result from change in the significance of the asset attributable to a proposed development, and the magnitude of impact reflects the degree of change in the asset's significance.

- 12.2.14. Change can arise as a result of construction on below-ground archaeological assets resulting in physical loss. Change can also affect the significance of a heritage asset through the alteration of their setting, caused by the visibility or proximity of new structures, by noise or dust, or other elements.
- 12.2.15. Such change can be adverse or beneficial, temporary or permanent, reversible or irreversible. **Table 12.2** below presents the guideline magnitude of impact criteria related to heritage assets.

Magnitude of Impact	Example of Adverse change	Example of Beneficial Change
High	Total or substantial loss of the significance of a heritage asset. Substantial harm to a heritage asset's setting, such that the significance of the asset would be totally lost or substantially reduced (e.g. the significance of a designated heritage asset would be reduced to such a degree that its designation would be questionable or the significance of an undesignated heritage asset would be reduced to such a degree that its categorisation as a heritage asset would be questionable).	Prevention of further degradation of the asset consistent with safeguarding its heritage significance. Increase accessibility and understanding of visible assets by removal of visibly intrusive elements.
Moderate	Partial loss or alteration of the significance of a heritage asset. Considerable harm to a heritage asset's setting, such that the asset's significance would be materially affected/considerably devalued, but not totally or substantially lost.	Increase accessibility and understanding of visible assets by removal of visibly intrusive elements.
Low	Slight loss of the significance of a heritage asset. This could include the removal of fabric that forms part of the heritage asset, but that is not integral to its significance (e.g. the demolition of later extensions/additions of little intrinsic value). Some harm to the heritage asset's setting, but not to the degree that it would materially compromise the significance of the heritage asset. Perceivable level of harm, but insubstantial relative to the overall interest of the heritage asset.	Reduce rate of current degradation. Improve setting. Enhance existing character.
Negligible	A very slight change to the significance of a heritage asset.	Very minor benefit to, or positive addition of, one or more characteristics, features or elements

Table 12.2: Methodology for Assessing Magnitude

Magnitude of Impact	Example of Adverse change	Example of Beneficial Change
	This could include a change to a part of a heritage asset that does not materially contribute to its significance.	
	Very minor change to a heritage asset's setting such that does not affect its significance.	

12.2.16. The methodology defining how the significance of effect is calculated, in association with the duration of impacts, is set out in Chapter 1: Introduction of this ES (Document DCO 6.1/MCO 6.1).

Consultation

12.2.17. A summary of the key issues raised during consultation activities undertaken to date specific to the historic environment is presented in **Table 12.3** below, together with how these issues have been considered in the production of this Chapter. This also includes the relevant comments received from statutory consultees during the statutory consultation process, which was undertaken over a six-week period between Monday 3rd February 2025 and Monday 17th March 2025 and provides a response to the issue raised as required.

Date	Consultee and Type of Response	Issue Raised	Response to Issued Raised
July 2024	Initial Consultation - North West Leicestershire District Council	The Conservation Officer recommended that development at the EMG2 Main Site should not impact the ridge and furrow identified in the northwest of the site. Officer also requested assessment of viewpoints of parish Churches at Breedon & Diseworth & Diseworth Conservation Area.	In relation to the ridge and furrow at the EMG2 Works the trial trenching (Appendix 12F) nor the desk-based study (Appendix 12B) identified upstanding ridge and furrow earthworks. On this basis such features do not contribute any significance to assessed built heritage assets as set out at paragraphs 4.48 to 4.56 of Appendix 12A.
July 2024	Initial Consultation – North West Leicestershire District Council	The Conservation Officer also requested assessment of viewpoints of parish Churches at Breedon & Diseworth & Diseworth Conservation Area.	Assessment of Churches at Breedon & Diseworth & Diseworth Conservation Area has been considered at paragraphs 4.13 to 4.56 of Appendix 12A .
August 2024	Initial Consultation- FAS Heritage	FAS reported concerns regarding the loss of rural character and historic grain of	Mitigation measures introduced a "Community Park" addressing impacts to Diseworth Conservation Area in the

Table 12.3: Summary of consultations

Date	Consultee and Type of Response	Issue Raised	Response to Issued Raised
	Position Statement	parts of the Diseworth Conservation Area setting.	western and southwestern parts of the EMG2 Works maintaining some of the landscape character of open fields and tree belts.
August 2024	Initial Consultation- FAS Heritage Position Statement	FAS reported that the proposed development would alter the legibility of Diseworth Conservation Area from the EMG2 Main Site.	Creation of a "Community Park" would act as a buffer to the Conservation Area and retain this legibility. Views from Hyam's Lane would remain largely intact.
August 2024	Initial Consultation- FAS Heritage Position Statement	FAS reported that scheme would alter the character of historic routes in proximity to the Diseworth Conservation Area.	Hyam's Lane will be retained.
September 2024	The Planning Inspectorate - Scoping Opinion	The Planning Inspectorate asked for justification for the selection of the study area.	This information is contained at paragraph 1.5 of Appendix 12B and paragraph 1.6 of Appendix 12A .
September 2024	The Planning Inspectorate - Scoping Opinion	The Planning Inspectorate asked whether the proposed development would affect the historic landscape character with cross reference to the LVIA.	This information is set out in Section 12.5 and 12.8 of this Chapter.
September 2024	The Planning Inspectorate - Scoping Opinion	The Planning Inspectorate requested that the ES demonstrate how the existing areas of preservation in-situ will be retained or how their ongoing preservation would be secured.	This information is set out in Section 12.5 and 12.6 of this Chapter.
September 2024	The Planning Inspectorate - Scoping Opinion	The Planning Inspectorate stipulated that the ES should consider the effects of noise and vibration, air quality, light and proposed landscaping earthworks upon the Diseworth Conservation Area.	This information is set out in Section 12.5 and 12.8 of this Chapter.
September 2024	The Planning Inspectorate - Scoping Opinion	The Planning Inspectorate identified that the direct and indirect effects on heritage assets in the ES should include consideration of effects upon designated heritage assets, identification of all	This information is set out in Section 12.5 of this Chapter.

Date	Consultee and Type of Response	Issue Raised	Response to Issued Raised
		grades of Listed Buildings, and consideration of inter-visibility between historic sites. Cross reference to be made to the LVIA.	
September 2024	Scoping Opinion – Historic England	The Ancient Monuments Inspector recommended that impacts to the historic landscape, historical/ archaeological fabrics, and designated assets be assessed. Archaeological potential, landscape amenity, and culminative impacts should also be assessed.	The full assessment of the proposed impacts on all relevant heritage assets within the study area is contained within Appendices 12A to 12F .
		The assessment of the following assets was highlighted:	
		 Moated Site with Fishpond and Flood banks at Long Whatton SAM 	
		GII* Langley Priory	
		Diseworth Conservation Area	
		• St. Michael's Church	
		Old Hall Farm	
September 2024	Scoping Opinion- Leicestershire County Council	The Archaeological officer has recommended that baseline assessments be submitted which assess potential impacts upon both built heritage assets, archaeological assets, and historic landscape. This assessment should consider the results from the previous programme of archaeological evaluation at EMG1 and the EMG2 Main Site. The need for any further archaeological evaluation required should be identified.	This information is contained within Appendices 12B to 12F .
October 2024	On site liaison meeting with FAS (instructed by NWLDC)	Statement of common ground requested.	A statement of common ground has been prepared and is currently under active consideration.

Date	Consultee and Type of Response	Issue Raised	Response to Issued Raised
October 2024	On site liaison meeting with FAS	Further information on built heritage and historic landscape features requested.	Provided at paragraphs 4.13 to 4.56 of Appendix 12A .
October 2024	On site liaison meeting with FAS	Detailed information on mitigation measures requested	Relevant mitigation measures in relation to heritage is set out within Section 12.6 of this Chapter.
October 2024	On site liaison meeting with FAS	Built Heritage assessment to incorporate ZTV, wireframes and photomontages.	This has been included as set out within Appendix 12A .
October 2024	On site liaison meeting with FAS	Noise, vibration and lighting impacts to be included within assessment of development impacts to the Diseworth Conservation Area.	This information is set out in Section 12.5 and 12.8 of this Chapter.
October 2024	On site liaison meeting with FAS	Reference to ridge and furrow with EMG2 Main Site requested.	Provided at paragraphs 4.48 to 4.56 of Appendix 12A .
December 2024	Further Consultation- Leicestershire County Council	Full Ordnance Survey map coverage should be provided within the Archaeological Desk-Based Assessment	This information has been provided within Appendix 12B .
March 2025	Statutory Consultation – Leicestershire County Council	As part of Leicestershire County Council's response to the statutory consultation, no additional comments were made in relation to Archaeology.	-
April 2025	FAS (on behalf of NWLDC) – Response to the Statutory Consultation and Draft ES Cultural Heritage chapter	Loss of rural character and historic 'grain' of land close to Diseworth Conservation Area. Alteration of the character and legibility of Diseworth as a discrete settlement. This includes perception of its compactness when experienced approaching Diseworth on footpaths to the northeast and east; and Change to the character of historic routes, which reflect patterns of movement associated with Diseworth; Individual scoping of limited number of designated and	12.4.47 and at 3.23 - 3.24, 3.29 and 4.51 – 4.52 and 5.7 of Appendix 12A . Set out at 12.4.47 – 12.4.52 and at 4.34, 4.39, 5.7 and 5.35 of Appendix 12A . Set out at 12.4.47 – 12.4.52 of Appendix 12A .

Date	Consultee and Type of Response	Issue Raised	Response to Issued Raised
		non-designated heritage assets in Diseworth Conservation, including Old Hall Farmhouse;	Justified at 12.4.46 and at 4.10 and 4.40 – 4.42 of Appendix 12A .
		Quantification of EMG2 Main Site as small part of Diseworth Conservation Area's setting; and	Set out at 12.4.47 – 12.4.52 and at 3.21, 4.43 – 4.47, 4.53 and 5.33 of Appendix 12A .
		More detail on the setting's contribution to significance of Diseworth Conservation Area.	Detailed at 12.4.47 – 12.4.52, 4.50 – 4.55 and 5.33 of Appendix 12A .
		Lighting impacts on built heritage impacts.	Detailed at 5.9 – 5.13 of Appendix 12A .
		Noise and vibration impact on built heritage assets.	Detailed at 5.14 – 5.17 of Appendix 12A .
		Landscape mitigation measures and built heritage assets.	Detailed at 5.18 – 5.24 of Appendix 12A .

12.3. Policy, Guidance and Legislative Context

12.3.1. The below provides a specific planning policy, guidance, and legislative context overview in respect of heritage. This section is common to both the DCO Application and the MCO Application.

Legislation

Ancient Monuments and Archaeological Areas Act 1979

- 12.3.2. The Ancient Monuments and Areas Act 1979 (as amended by the National Heritage Act 1983 and the National Heritage Act 2002) provides protection to sites of national importance (Scheduled Monuments and other monuments considered by the Secretary of State to be of equivalent status).
- 12.3.3. There are no Scheduled Monuments within or close to the **EMG2 Project** (a number of distant scheduled monuments were initially considered as part of the Archaeological Desk-Based Assessment (**Appendix 12B** (**Document DCO 6.12B/MCO 6.12B**)).

Planning (Listed Buildings and Conservation Areas) Act 1990

12.3.4. Where any development may affect certain designated heritage assets, there is a legislative framework to ensure proposed works are developed and considered with due regard to their impact on the historic environment. This is contained in primary legislation in the Planning (Listed Buildings and Conservation Areas) Act 1990 (1990 Act).

- 12.3.5. The relevant legislation in this case derives from sections 16 and 66 of the 1990 Act which states that special regard must be given by the decision maker, in the exercise of planning functions, to the desirability of preserving (i.e. keeping from harm) listed buildings and their setting.
- 12.3.6. Section 72 of the 1990 Act is not engaged in this case since no part of the **EMG2 Project** is on land within a conservation area.

National Planning Policy

National Networks National Policy Statement

12.3.7. The National Networks National Policy Statement (NPS) (Department for Transport, 2024) sets out the UK Government's policy for the delivery of nationally significant road and rail networks. The NPS, at Paragraphs 5.204 – 5.226, recognises the need to consider heritage assets within the application and determination process given the construction and operation of national infrastructure has the potential to result in adverse impacts on the historic environment.

12.3.8. Paragraph 5.210 states that:

The applicant should undertake an assessment of any significant heritage impacts of the proposed project and should describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the asset's importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum, the relevant Historic Environment Record should have been consulted and the heritage assets assessed using appropriate expertise. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, the applicant should include an appropriate desk-based assessment and, where necessary, a field evaluation.

12.3.9. Paragraph 5.220 states that:

Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset, the greater the justification that will be needed for any loss.

National Planning Policy Framework (NPPF) 2024

- 12.3.10. Section 16 of the NPPF, entitled 'Conserving and Enhancing the Historic Environment' provides policy on the conservation and investigation of heritage assets.
- 12.3.11. Paragraph 207 states that planning decisions should be based on the significance of the heritage asset, including any contribution made by their setting. The level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than is sufficient to review the potential impact of the proposal on the significance of that asset. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with

archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

- 12.3.12. Paragraph 212 states that great weight should be given to a heritage asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.
- 12.3.13. Paragraph 214 states that where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss. Or that (a) the nature of the heritage asset prevents all reasonable uses of the site; and (b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and (c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and (d) the harm or loss is outweighed by the benefit of bringing the site back into use.
- 12.3.14. Paragraph 215 states that where a development proposal 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.
- 12.3.15. Paragraph 216 states that where an application will affect the significance of a non-designated heritage asset, a balanced judgement is required, having regard to the scale of harm or loss and the significance of the heritage asset.
- 12.3.16. The assessment of the likely potential impacts of the EMG2 Project has been undertaken in accordance with the NPPF. Relevant designated assets surrounding the EMG2 Project and non-designated heritage assets on and surrounding the EMG2 Project have been identified and the likely potential impacts of the proposals assessed proportionately within the ES and baseline appendices.

National Planning Guidance

12.3.17. In addition to relevant planning policy, a number of relevant national guidance documents have been considered during the assessment. These are summarised below.

Planning Practice Guidance

12.3.18. The Planning Practice Guidance (PPG) supports the NPPF. It reiterates that conservation of heritage assets in a manner appropriate to their significance is a core planning principle. It also states that conservation is an active process of maintenance and managing change, requiring a flexible and thoughtful approach. Furthermore, it highlights that neglect and decay of heritage assets is best addressed through ensuring they remain in active use that is consistent with their conservation. Importantly, the guidance states that if complete or partial loss of a heritage asset is justified, the aim should then be to capture and record the evidence of the asset's significance and to make the interpretation publicly available.

Historic England

Good Practice Advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment (March 2015)

- 12.3.19. This document provides advice on numerous ways in which decision making in the historic environment could be undertaken, emphasising that the first step for all applicants is to understand the significance of any affected heritage asset and the contribution of its setting to that significance. In line with the NPPF and PPG, the document states that early engagement and expert advice in considering and assessing the significance of heritage assets is encouraged. The advice suggests a structured, staged approach to the assembly and analysis of relevant information:
 - Understand the significance of the affected assets;
 - Understand the impact of the proposal on that significance;
 - Avoid, minimise and mitigate impact in a way that meets the objectives of the NPPF;
 - Look for opportunities to better reveal or enhance significance;
 - Justify any harmful impacts in terms of the sustainable development objective of conserving significance balanced with the need for change; and
 - Offset negative impacts to significance by enhancing others through recording, disseminating and archiving archaeological and historical interest of the important elements of the heritage assets affected.

GPA3: The Setting of Heritage Assets (Second Edition; December 2017)

- 12.3.20. This advice note focuses on the management of change within the setting of heritage assets in order to aid practitioners with the implementation of national legislation, policies and guidance relating to the setting of heritage assets found in the 1990 Act, the NPPF and PPG.
- 12.3.21. As with the NPPF, the document defines setting as 'the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve'. Setting is also described as being a separate term to curtilage, character and context. The guidance emphasises that setting is not a heritage asset, nor a heritage designation, and that its importance lies in what it contributes to the significance of the heritage asset, or the ability to appreciate that significance. It also states that elements of setting may make a positive, negative or neutral contribution to the significance of the heritage asset.
- 12.3.22. While setting is largely a visual term, with views considered to be an important consideration in any assessment of the contribution that setting makes to the significance of an asset, and thus the way in which an asset is experienced, setting also encompasses other environmental factors including noise, vibration and odour. Historical and cultural associations may also form part of the asset's setting, which can inform or enhance the significance of a heritage asset.
- 12.3.23. The advice note provides guidance on practical and proportionate decision making with regards to the management of change within the setting of heritage assets. It states that the protection of the setting of a heritage asset need not prevent change and that decisions relating to such issues need to be based on the nature, extent and level of the significance of a heritage asset,

further weighing up the potential public benefits associated with the proposals. It is further stated that changes within the setting of a heritage asset may have positive or neutral effects.

- 12.3.24. The document also states that the contribution made to the significance of heritage assets by their settings will vary depending on the nature of the heritage asset and its setting, and that different heritage assets may have different abilities to accommodate change without harming their significance. Setting should, therefore, be assessed on a case-by-case basis.
- 12.3.25. Historic England recommends using a series of detailed steps in order to assess the potential effects of a proposed development on significance of a heritage asset. The five-step process is as follows:
 - 1) Identify which heritage assets and their settings are affected;
 - 2) Assess the degree to which these settings and views make a contribution to the significance of a heritage asset(s) or allow significance to be appreciated;
 - 3) Assess the effects of the proposed development, whether beneficial or harmful, on the significance or on the ability to appreciate it;
 - 4) Explore ways to maximise enhancement and avoid or minimise harm; and
 - 5) Make and document the decision and monitor outcomes.

Local Planning Policy

North West Leicestershire Local Plan 2011- 2031 (November 2017, readopted March 2021)

- 12.3.26. The relevant Development Plan Policy is currently provided by North West Leicestershire District Council's Local Plan which was originally adopted in November 2017 and was readopted in March 2021 following a partial review. The Local Plan contains policy relating to heritage matters.
- 12.3.27.Policy HE1 (Conservation and Enhancement of North West Leicestershire's Historic Environment) states that:

(1) To ensure the conservation and enhancement of North West Leicestershire's historic environment, proposals for development, including those designed to improve the environmental performance of a heritage asset, should:

a) Conserve or enhance the significance of heritage assets within the district, their setting, for instance significant views within and in and out of Conservation Areas;

b) Retain buildings, settlement patterns, features and spaces, which form part of the significance of the heritage asset and its setting;

c) Contribute to the local distinctiveness, built form and scale of heritage assets through the use of appropriate design, materials and workmanship;

d) Demonstrate a clear understanding of the significance of the heritage asset and of the wider context in which the heritage asset sits.

(2) There will be a presumption against development that will lead to substantial harm to, or total loss of significance of a designated heritage asset. Proposals will be refused consent,

unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh the harm or loss or all of the following apply:

- The nature of the heritage asset prevents all reasonable uses of the site; and
- no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
- conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and
- The harm or loss is outweighed by the benefit of bringing the site back into use.

Where a development proposal 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.

(3) Where permission is granted, where relevant the Council will secure appropriate conditions and / or seek to negotiate a Section 106 Obligation to ensure that all heritage assets are appropriately managed and conserved.

(4) The District Council will support development that conserves the significance of nondesignated heritage assets including archaeological remains.

12.4. Baseline Conditions

- 12.4.1. The technical appendices (Built Heritage Assessment (Appendix 12A (Document DCO 6.12A/MCO 6.12A)), Archaeological Desk Based Assessment (Appendix 12B (Document DCO 6.12B/MCO 6.12B)), Geophysical Survey (Appendix 12C (Document DCO 6.12C/MCO 6.12C)), Geoarchaeological Assessment (Appendix 12D (Document DCO 6.12D/MCO 6.12D)), Fieldwalking Assessment (Appendix 12E (Document DCO 6.12E/MCO 6.12E)), and Trial Trenching (Appendix 12F (Document DCO 6.12F/MCO 6.12F)) identify the baseline conditions at the EMG2 Project in detail. Some of the appendices relate to the EMG2 Main Site/Community Park only as further outlined below.
- 12.4.2. For the purposes of this section, all references to the **EMG2 Works** relates to the EMG2 Main Site/Community Park and excludes the substation.

Geology and Topography

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- 12.4.3. The solid geology of the southern part of the EMG2 Works to the east of Diseworth is recorded as predominantly Gunthorpe Member mudstone, with multiple fault lines resulting in narrow outcrops of Gunthorpe Member siltstone and Diseworth Sandstone also being present. Superficial deposits are present within the northern half of the study site consisting of Glaciofluvial Deposits and Oadby Member deposits, with narrow isolated head deposits present in the northwest and southeast of the study site infilling potential dry valleys. The geoarchaeological assessment work undertaken (Appendix 12D (Document DCO 6.12D/MCO 6.12D)) identified similar results.
- 12.4.4. The EMG2 Works are located in an area of south facing, gentle rising ground, with the southern boundary associated with the 60m-65m contour, and the northern boundary associated with the 85m-90m contour. The highest point lies at 93m above Ordnance Datum (aOD) and is associated with a trig point located adjacent to Hyam's Lane in the northeast corner of the EMG2

Works. The course of the Long Whatton Brook is located approximately 250m to the southwest, while a minor tributary of the Brook forms part of the western boundary.

- 12.4.5. With regard to the **Highways Works**, in proximity of Junction 24A of the M1, Edwalton Member mudstone deposits are recorded, with a mix of superficial head, Egginton Common Sand and Gravel Member, and Wanlip Member sand and gravel. To the south of Junction 24A along the M1 corridor the solid geology comprises Tarporley Siltstone Formation and Gunthorpe Member, with little in the way of superficial deposits recorded.
- 12.4.6. The course of the River Trent is located approximately 2km to the north of the DCO Application.

MCO Application

- 12.4.7. The **EMG1 Works** overlay a solid geology consisting of Tarporley Siltstone Formation siltstone, mudstone and sandstone. Superficial deposits in this area are limited to localised outcrops of head and Eagle Moor Sand and Gravel Member deposits.
- 12.4.8. The topography of the existing EMG1 development slopes, at first gently and then steeply upwards, from approximately 35-38m aOD up to just over 90m aOD to the west, where the study site abuts the plateau upon which East Midlands Airport is situated. The east-west slope is cut by a steep-sided valley draining from the plateau in a northerly direction, and the village of Lockington is sited to the north, where this valley reaches the Trent flood plain. This small valley creates a fairly steep east and west facing gradients within the general trend of the north-facing slope.
- 12.4.9. The course of the River Trent is located approximately 2km to the north of the MCO Application.

Heritage Assets within the Boundary of the EMG2 Project

Designated Heritage Assets

12.4.10. There are no designated heritage assets within the EMG2 Project boundary.

Non-Designated Heritage Assets

- 12.4.11. The identified potential for non-designated heritage assets within the **EMG2 Project** boundary is associated with the archaeological assets present. There are no non-designated built heritage assets present within the **EMG2 Project** boundary.
- 12.4.12. This Chapter is supported by the findings of a detailed programme of archaeological evaluation (see paragraphs 12.2.6 and 12.2.10 above) which comprised both desk-based and field-based investigations.
- 12.4.13. These studies identified a number of archaeological receptors which could be affected by the EMG2 Project and these are discussed below. A plan showing the location of the archaeological receptors in relation to the DCO Application and MCO Application boundaries is provided in Appendix 12G (Document DCO 6.12G/MCO 6.12G).

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EMG2 Works

- 12.4.14. Archaeological Resource (AR1) comprises a low density of features potentially associated with the Middle to Late Iron Age period. This receptor was first identified during the geophysical survey (Appendix 12C (Document DCO 6.12C)), the trial trenching (Appendix 12F (Document DCO 6.12F)) subsequently confirming the presence of a series of linear and discrete features containing animal bone, slag, flint and pottery located within trial trenches 291-294, and 299. Such archaeological features appear to represent peripheral Iron Age settlement activity and therefore can be considered to be of local significance and Low sensitivity.
- 12.4.15. Archaeological Resource (AR2) comprises a low density of features potentially associated with the Middle to Late Iron Age and Roman periods. This receptor was first identified during the geophysical survey (Appendix 12C (Document DCO 6.12C)), the trial trenching (Appendix 12F (Document DCO 6.12F)) subsequently confirming the presence of a series of linear features containing animal bone, slag, and pottery located within trial trenches 97, 98, 101, 103, and 394. Such archaeological features appear to represent Iron Age and Roman agricultural activity and therefore can be considered to be of local significance and Low sensitivity.
- 12.4.16. Archaeological Resource (AR3) comprises three features (two ditches and a pit) dated by the recovery of pottery to the Post-Medieval period. This receptor was first identified within trial trenches 206, 208, and 211 (Appendix 12F (Document DCO 6.12F)). Such archaeological features appear to represent former Post-Medieval field boundaries and agricultural activity and therefore can be considered to be of No Importance/sensitivity.
- 12.4.17. Archaeological Resource (AR4) comprises evidence for Post-Medieval ridge and furrow cultivation. Evidence of such activity is evident in the LiDAR data (Appendix 12B (Document DCO 6.12B)) and geophysical survey data (Appendix 12C (Document DCO 6.12C)), although no surviving evidence for such features were recorded during the trenched evaluation (Appendix 12F (Document DCO 6.12F)). The ridge and furrow earthworks (AR4) are of limited interest and considered to be of No Importance/sensitivity.
- 12.4.18. Archaeological Resource (AR5) relates to existing field boundaries within the EMG2 Works of likely Post-Medieval date that have been identified by the Archaeological Desk-Based Assessment (Appendix 12B (Document DCO 6.12B)) of historic interest, and of local significance and Low sensitivity.
- 12.4.19. Archaeological Resource (AR6) comprises a low density of features consisting of three undated ditches first identified within trial trenches 314, 315, and 317 (Appendix 12F (Document DCO 6.12F)). Such archaeological features appear to represent a single former field boundary and, therefore, can be considered to be of No Importance/sensitivity.

Highways Works

12.4.20. Archaeological Resource (AR9) comprises of a low density of Roman ditches, first identified during the programme of evaluation at EMG1, initially during the geophysical survey and then subsequently exposed during the trial trenching (Appendix 12B (Document DCO 6.12B)). As the construction of the development of EMG1 did not impact the area containing AR9, such features were preserved *in-situ* within existing agricultural land. Due to the peripheral

agricultural character of such features, they can be considered to be of local significance and Low sensitivity.

MCO Application

EMG1 Works

- 12.4.21. Archaeological Resource (AR7) comprises a low to moderate density of features potentially associated with the Late Iron Age or Early Roman periods. This receptor was first identified during the programme of evaluation at EMG1, initially during the geophysical survey and then subsequently exposed during the trial trenching (Appendix 12B (Document MCO 6.12B)). These features were then subsequently preserved *in-situ* underneath the north-west landscape bund at EMG1. Such archaeological features appear to represent peripheral Iron Age or Early Roman agricultural activity and therefore can be considered to be of local significance and Low sensitivity.
- 12.4.22. Archaeological Resource (AR8) comprises a low density of features potentially associated with the Roman period. This receptor was first identified during the programme of evaluation at EMG1, initially during the geophysical survey and then subsequently exposed during the trial trenching (Appendix 12B (Document MCO 6.12B)). These features were then subsequently preserved *in-situ* underneath the north-west landscape bund at EMG1. Such archaeological features appear to represent peripheral Roman agricultural activity and therefore can be considered to be of local significance and Low sensitivity.

Heritage Assets Beyond the Boundary of the EMG2 Project

Designated Heritage Assets - Archaeology

12.4.23. The baseline Archaeological Desk-Based Assessment (Appendix 12B (Document DCO 6.12B/MCO 6.12B)) identified that 7 designated Scheduled Monuments were identified to lie within approximately 2km of the EMG2 Project, a study area that was determined through a combination of a site visit and professional opinion. Two Scheduled Monuments were located within 2km of the DCO Application boundary, while 5 Scheduled Monuments were associated with the 2km study area associated with the MCO Application boundary. These assets will be unaffected by the EMG2 Project due to the lack of any visual, functional and known historic connection or association with the EMG2 Project.

DCO Application

- 12.4.24. With regard to the **EMG2 Works**, The Bulwarks Scheduled Monument (AR10) located approximately 5km southwest was also assessed due to its prominent landscape position and intervisibility.
- 12.4.25. The Bulwarks (AR10) is a heritage asset of high, national significance. The significance of the asset primarily derives from its evidential value due to the survival of upstanding earthworks associated with the Iron Age hillfort, as well below-ground archaeological remains that will have been preserved. Aesthetic value derives from appreciation of the earthworks, with the prominent hilltop location providing extended views of the asset over a wide landscape. Due to the presence of public footpaths the monument retains a degree of communal value. Historical value is limited due to the lack of documentation relating to the hillfort itself.

- 12.4.26. The primary setting of the asset will comprise the immediate rural landscape, out to approximately 1km from the monument, where the earthworks can be viewed and appreciated, and original rural context of the asset can be understood. This immediate setting will strongly contribute to both the evidential and aesthetic values of the asset. Due the prominent location of the Scheduled Monument the wider setting of the asset will encompass an extensive swath of the surrounding countryside as the monument, and the hill it is located upon, will be visible for an extended distance. This wider setting would contribute to a lesser degree to the aesthetic value of the asset.
- 12.4.27. The asset's importance primarily derives from its upstanding earthworks and buried archaeological remains, the aesthetic interest of its earthworks, and its communal value to its current level of accessibility. The wider setting, of which the application site is a very small part, provides a secondary level of contribution to the asset's importance. Consequently, the EMG2 Works as a limited part of the asset's wider landscape context, provides a very low level of contribution to the asset's heritage importance/sensitivity.
- 12.4.28. The **Highway Works** have been assessed has having no impact on off-site archaeological assets.

MCO Application

EMG1 Works

12.4.29. The EMG1 Works have been assessed has having no impact on off-site archaeological assets.

Designated Heritage Assets - Built Heritage

DCO Application

- 12.4.30. The baseline Built Heritage Assessment for the EMG2 Works (Appendix 12A (Document DCO 6.12A)) identified that 37 designated built heritage resources within 2km of the EMG2 Project. However, the majority of these will be unaffected by the EMG2 Project due to the lack of any visual, functional and known historic connection or association with the EMG2 Project.
- 12.4.31.A number of other built heritage receptors located beyond 2km of the EMG2 Project were initially considered during the survey work associated with the Bult Heritage Assessment (Appendix 12A (Document DCO 6.12A)). These included Long Whatton Conservation Area and the built heritage assets therein (c.1.4 km to the southeast); Church of St Peter and St Paul, Belton (c. 4 km to the south); and the Church of St Hardulph (c.5.1 km to the west). All of these were discounted from further consideration due to their extended distance from the EMG2 Project and the lack of legibility of their heritage importance. In particular, Whatton Conservation Area is largely screened by the planted embankments of the M1 and A42.
- 12.4.32. Of the designated built heritage assets identified within the 2km search area of the EMG2 Project, specifically the EMG2 Works, that is considered to form part of the setting of, and thereby have the potential to affect, the asset, it is only the Grade II* Church of St Michael and All Angels (BH1) in the centre of Diseworth, and the Diseworth Conservation Area (BH2) that are affected. The latter includes the consideration, as individually appropriate, designated and non-designated built heritage assets within the Conservation Area.

Church of St Michael and All Angels (BH1)

12.4.33. The Church of St Michael and All Angels (BH1) is located in the centre of Diseworth, approximately 350m from the southwest corner of the EMG2 Works. It is positioned to the immediate southeast of the crossroads to the village's four gate streets. The Church was designated December 1962 at Grade II*. The listing citation notes that it is a:

'Parish church. Eleventh to twelfth-century origin but substantially thirteenth century with a fourteenth-century tower. North porch dated 1661. Nineteenth and twentieth-century restorations. Rubble stone with ashlar tower and lead roofs. West tower, nave, south aisle, north porch, chancel. The west tower is of two stages with diagonal buttresses. Two-light traceried west window and wide arched single lights in double-chamfered surrounds to the bell chamber. Broach spire with a single tier of lucarnes. [...]'.

- 12.4.34. The Historic Environment Record notes that the Church is listed in the Matriculus of 1220. The west tower is noted as dating to c.1300. Pevsner [1984] notes the 'west tower of c.1300, with triple-chamfered bell openings, their tracery and cusping apparently removed. Spire with tall broaches and lucarnes'.
- 12.4.35. The Church of St Michael and All Angels (BH1) is a heritage asset of high, national significance. This is reflected in its statutory designation as a Grade II* listed building. This marks the Church as being within the top 7% of England's most important historic buildings.
- 12.4.36. The architectural and historic importance of the Church is high. This arises from the architectural and aesthetic value of its medieval form and fabric and this fabric's age. The Church holds group value with the cemetery and the associated monuments. There is group value too with the historic core of Diseworth, and the individual historic buildings therein, which the Church serves.
- 12.4.37.The immediate setting of the asset comprises its cemetery and the immediate historic core of Diseworth. These elements of setting have a primary contribution to the asset's significance.
- 12.4.38. The broach spire to the Church is a prominent landmark within the historic core of Diseworth (the Conservation Area). It is noted in the Conservation Area Appraisal and Study as being visible in much of the approach to 'the Cross' along Hall Gate from the west. It is not noted as being prominent from any other location.
- 12.4.39. The wider setting, due to the Church's spire height extending higher than the roofscape of Diseworth, extends to the surrounding fields. From this area the Church is largely legible as an historic church set in the centre of an historic village. Views of the spire are largely available from most of the **EMG2 Works** excepting the far north-eastern field. The kinetic view of the spire, and its setting within the village, strengthen as one descends Hyam's Lane towards Diseworth.
- 12.4.40. Views of the Church's spire in the centre of Diseworth from the southwest of the village includes some of the upper fields of the **EMG2 Works** as a backdrop. However, these views include, as a skyline backdrop, some of the large-scale industrial units, warehousing, towers, masts and associated infrastructure set on the ridge to the north, all part of or surrounding the East Midlands Airport.

- 12.4.41. There is no evidence of any direct historical association between the Church and the **EMG2 Works**, although it is clear that this agricultural land is part, albeit a small part, of the setting to this historic agricultural settlement in which it sits.
- 12.4.42. The asset's importance primarily derives from its historic medieval origins, the architectural and aesthetic interest of its fabric and form, and its historical association with the historic core of Diseworth (with the cemetery forming the asset's immediate setting). The wider setting, of which the **EMG2 Works** is a small part, provides a secondary level of contribution to the asset's importance. Consequently, the **EMG2 Works**, as a small part of the asset's wider historic agricultural, rural context, provides a low level of contribution to the asset's heritage importance/sensitivity.

Diseworth Conservation Area (BH2)

- 12.4.43. Diseworth Conservation Area (BH2) was first designated in February 1974. The Conservation Area boundary was revised and extended in April 2001.
- 12.4.44. The Conservation Area Appraisal and Study (CAA) sets out that the special character and appearance of the Area:

'is derived from the informal grouping of farmhouses, outbuildings and the former tied cottages along the curvatures of the principal streets. Although modern infill housing development has been undertaken, the overall pattern of the pre-enclosure settlement remains largely evident'.

- 12.4.45. The CAA goes on to conclude that most properties in the Area are of two storeys in height though some farmhouses have three storeys. Consequently, the one landmark building is the Church of St Michael and All Angels, although the spire is only noted as standing out from within the Area from the west along New Hall Gate.
- 12.4.46. There are 22 listed buildings in the Conservation Area predominantly dating from the sixteenth to the eighteenth centuries and these largely display local vernacular building traditions. The CAA also identifies nearly 50 'Unlisted Buildings of Interest'. Many of these buildings also reflect local vernacular traditions.
- 12.4.47. Excepting for the Church of St Michael and All Angels, the approximately 70 designated and non-designated historic buildings within the Area are largely subsumed within the built form of the village and screened from the **EMG2 Works**. This is to such a degree that none of these individual historic buildings' significance is meaningfully legible from the **EMG2 Works** and intervisibility is extremely limited. Therefore, in this case, the individual historic buildings (excepting the Church) are appropriately dealt with as a collective whole with the Conservation Area. This includes Old Hall Farm and other built heritage receptors along St Clement's Gate.
- 12.4.48.In terms of the Conservation Area's relationship with the surrounding landscape, therefore including the **EMG2 Works** as a small part of its wider setting, the CAA notes that:

'the agricultural land surrounding the village with its straight boundaries and surviving hedgerows appears to reflect the landscape created by the enclosure of Diseworth Parish in 1794. [...].

The location of the village within a shallow valley means that views out of the Area are restricted. [...] The curvature of the principal streets also presents a further restriction to views out of the Area'.

- 12.4.49. The CAA only notes good views southwards out of the area to the surrounding countryside to the rear of properties on the southern side of Clements Gate over the Diseworth Brook. It is also noted that where views are afforded from the countryside south of the village, the backdrop includes industrial structures and buildings associated with the East Midlands Airport, including the recently completed control tower.
- 12.4.50. While there is some legibility of Diseworth as an historic village (the roofscape of the historic core) from many parts of the **EMG2 Works**, this legibility is mainly signified by the landmark presence of the Church spire.
- 12.4.51. The CAA also notes the twentieth-century residential infills along the gate streets. It was published, however, before the more extensive back land and rear residential development behind the eastern side of Grimes Gate. This includes, at the northern end, Old Hall Court. This small residential estate is on the south side of Hyam's Lane as it enters Diseworth and screens the built heritage assets at Hall Farm to the west from the **EMG2 Works**. All the eastern back lands to Grimes Gate to the south of Old Hall Court, excluding a small area adjacent to the cricket pavilion, have been infilled with recent residential development, including Cheslyn Court accessed from Grimes Gate and Diseworth Grange accessed off the north side of Clements Gate.
- 12.4.52. All these recent developments on the north-eastern side of the village fall within the boundary of the Conservation Area and are all likely to fall in the setting of listed buildings in the Area. All these recent developments strengthen the screening of the individual designated and non-designated built heritage assets within the area from the **EMG2 Works**.
- 12.4.53. The character and appearance (importance/sensitivity) of the Conservation Area primarily relates to the medieval morphology of the four principal gate streets. It is the historic morphology of the village and the historic buildings therein that provides the primary contribution to the asset's significance. The Area's setting is formed by the open agricultural land within the shallow valley around the village. The historic core of the village is largely discrete within this setting. Views of the Church's spire are largely available from most of the **EMG2 Works** excepting the far north-eastern field, although the site forms a small part of the Conservation Area's setting, which itself provides a secondary level of contribution to the asset's significance. Consequently, the **EMG2 Works** provides a low level of contribution to the heritage importance/sensitivity of Diseworth Conservation Area.
- 12.4.54. The **Highway Works** have been assessed as having no impact on off-site designated built heritage assets.

MCO Application

Church of St Andrew (BH3)

12.4.55. The Church of St Andrew (BH3) is located c.1.32km to the east of the **EMG1 Works**. It is positioned within the historic core of the town of Kegworth in a relatively elevated position on the west side of the River Soar. Its spire is visible in glimpsed views across the **EMG1 Works**

site from some positions on top of the landscape bund to the northwest. The Church was designated December 1962 at Grade II*. The listing citation notes that it is a:

'Parish church. Lower part of tower is C13, remainder of church all C14 and C15 clerestory. Restored 1859-60 by Joseph Mitchell of Sheffield. Further restoration to tower and spire 1875 and 1886. Ashlar, with lead roofs. Cruciform plan with west tower, aisled nave, and contemporary vestry to north of chancel. Fine large building in Decorated style, with moulded plinth and sill strings, battlemented parapets, off-set buttresses, and large arched windows with restored reticulated tracery. Earlier west tower is of 4 stages with chamfered lancets to 2 lower stages, and C13 2-light openings with colonnette mullions to third stage. New bell-chamber added C14 with 2-light traceried openings, embattled parapet, and fine octagonal spire. Spire has 2 tiers of lucarnes. C19-C20 door with Caernarvon arch inserted into south side of tower. Nave has C15 clerestory with 6 bays of rectangular 3-light windows, all with ogee tracery. Remainder of church is in Decorated style [...]'.

- 12.4.56. The Church of St Andrew (BH3) is a heritage asset of particularly high, national significance. This is reflected in its statutory designation as a Grade II* listed building. This marks the Church as being within the top 7% of England's most significant historic buildings.
- 12.4.57. The architectural value of the Church is particularly high. This arises from its medieval fabric, and the decorative features and monuments in the interior of the Church. The Church also holds high historic value. The Church is the historic parish church to a medieval town and is probably the site of a Saxon precursor. The town of Kegworth is associated with the last Saxon king. The current Church includes later medieval and nineteenth-century modifications.
- 12.4.58. The Church holds group value with the non-designated monuments in the Church's cemetery and the cemetery itself. There is group value too with heritage assets in the historic core of Kegworth, particularly the adjacent, to the south, medieval former market site.
- 12.4.59. The immediate setting of the asset comprises its cemetery (group value of associated monuments is noted above) and the adjacent historic former market place. These elements of setting have a significant contribution to the asset's significance.
- 12.4.60. The wider setting, due to the Church's relatively elevated position above the River Soar with its enclosure by the built form of the town of Kegworth and rising ground to the east, mainly extends to the northeast, east and southeast, comprising the river valley and the largely open countryside to the east of the town. The Church's spire is a notable landmark from most of these areas. There are no direct meaningful views of the Church from any part of the **EMG1 Works** site. There are some limited views of the spire in views from parts of the landscape bund to the northwest. In these views the asset is legible as an historic place of worship of no later than a nineteenth-century date, at the centre of and serving Kegworth.
- 12.4.61. There is no evidence of any historical association between the Church and the **EMG1 Works** area.
- 12.4.62. The Church of St Andrew (BH3) is a heritage asset of particularly high, national significance. The asset's significance primarily relates to its medieval and nineteenth-century fabric and form, including internal features and monuments. There is group value with its cemetery and the monuments therein. Further group value is derived from the historic core of Kegworth and particularly the adjacent historic market site. It is also the historic parish church to a town associated with the last Saxon king.

12.4.63. The immediate setting, the cemetery, the monuments therein and the likely site of its Saxon precursor also provide a significant level of contribution to the asset's significance. The EMG1 Works site forms a very tiny part of the asset's large wider setting, which is predominantly made up of the open countryside to the east and the valley of the River Soar. Consequently, the EMG1 Works site offers no meaningful contribution to the asset's significance.

Non-Designated Heritage Assets

DCO Application

- 12.4.64. The Diseworth Conservation Area (BH2) contains a number of buildings identified as nondesignated heritage of interest in the CAA. The impact of the **EMG2 Works** in regard to these buildings has been incorporated into the assessment of the Diseworth Conservation Area as a whole.
- 12.4.65. The **Highway Works** have been assessed has having no impact on non-designated built heritage assets.

EMG1 Works

12.4.66. The **EMG1 Works** have been assessed has having no impact on non-designated built heritage assets.

Summary of Heritage Assets

12.4.67. Following the assessment work undertaken, the heritage assets which may be adversely affected by the **EMG2 Project**, and their recognised sensitivity, has been summarised in **Table 12.4** below.

Development Component	Receptor	Sensitivity
DCO Applicatio	n	
EMG2 Works	AR1: Middle to Late Iron Age Peripheral Settlement Activity	Low
	AR2: Iron Age and Roman Agricultural Activity	Low
	AR3: Post-Medieval Field Boundaries	No Importance
	AR4: Post-Medieval Ridge and Furrow	No Importance
	AR5: Existing Post-Medieval Field Boundaries of Historic Interest	Low
	AR6: Undated Ditches	No Importance
	AR10: The Bulwarks Scheduled Monument	High
	BH1: Grade II* Church of St Michael and All Angels	High

	BH2: Diseworth Conservation Area	Moderate	
Highways Works	AR9: Roman Agricultural Activity Low		
MCO Applicatio	MCO Application		
EMG1 Works	AR7: Iron Age and Roman Agricultural Activity	Low	
	AR8 Roman Agricultural Activity	Low	
	BH3: Church of St Andrew	High	

12.5. Potential Impacts

12.5.1. This section considers the potential construction and operational impacts arising from the DCO Application and the MCO Application respectively by reference to the various components of the **EMG2 Project**. The **EMG2 Project** may adversely affect heritage assets during the construction phase, when significance may be lost as a result of physical removal of a heritage asset or as a result of change in the setting of the asset, and during its operational or post-construction phase, when significance may be lost as a result of change in setting.

Embedded Mitigation

12.5.2. The embedded mitigation of relevance to this assessment is that associated with the EMG2 Works, comprising extensive bunding and structural landscaping provided along the western edge of the EMG2 Main Site and the Community Park to the west of that, along the western side of the EMG2 Works, together with the retention of Hyam's Lane in its existing form (with its hedgerows). The landscape planting within the Community Park will take the form of a continuous wildflower grassland with scattered scrub and trees and surface water drainage features whilst retaining its open landscape character. Furthermore, woodland planting is proposed at the apex and the upper slopes of the mitigation mounding; a more open mosaic of scrub on the lower slope; and a wild grassland margin towards the western boundary.

Construction Impacts

DCO Application

- 12.5.3. Archaeological Resources (AR1-AR6) are all situated in areas proposed for development. The result of this would be the complete, or near complete, removal of these archaeological remains from the EMG2 Works. As such, a high magnitude impact would arise as a result of the development.
- 12.5.4. AR1, AR2, and AR5 are considered to be of Low sensitivity. As a result, a Moderate to Minor Adverse magnitude of effect would arise on these archaeological features.
- 12.5.5. AR3, AR4, and AR6 are considered to be of No Importance in terms of sensitivity. As a result, there would be a Negligible magnitude of effect on these archaeological features.

- 12.5.6. Due to their relative proximity to the EMG2 Works a degree of noise, airborne dust, and light-spill would be perceptible from receptors (BH1 Church of St Michael and All Angels) and (BH2 Diseworth Conservation Area) during construction. Receptor AR10 The Bulwarks, due to the extended distance between the asset and the EMG2 Works, impacts are likely to be limited to visual intrusion generated by the construction works taking place.
- 12.5.7. In respect to BH1, BH2 and AR10 this will result in no more than a short term, negligible adverse magnitude of effect on these receptors, and thus a negligible significance of effect.

Highway Works

- 12.5.8. Archaeological Resource AR9 is situated in an area proposed for development. The result of this would be the complete, or near complete, removal of these archaeological remains from the **Highways Works**. As such, a high magnitude impact would arise as a result of the development.
- 12.5.9. AR9 is considered to be of Low sensitivity. As a result, the **Highways Works** would result in a Moderate to Minor Adverse magnitude of effect on these archaeological features.

MCO Application

EMG1 Works

- 12.5.10. The **EMG1 Works** will only encroach into the area where Archaeological Resource AR7 is located by a short distance, leaving the greater proportion of AR7 retained underneath the existing landscape bund. As such, a low magnitude impact would arise as a result of the development. AR7 is considered to be of Low sensitivity. As a result, a Minor to Negligible Adverse magnitude of effect would arise on these archaeological features.
- 12.5.11. Archaeological Resource AR8 although located within the **EMG1 Works** will not be impacted by the development proposals, being located outside of the footprint of the proposed buildings and protected by means of a fenced enclosure. As such there would be no impact to the asset.
- 12.5.12. In respect of BH3 [Church of St Andrew] due to the extended distance between the asset and the **EMG1 Works**, impacts are likely to be limited to visual intrusion generated by the construction works taking place.
- 12.5.13. In respect to BH3 this will result in no more than a short term, negligible adverse magnitude of effect on these receptors, and thus a negligible significance of effect.

Operational Impacts - Archaeology

DCO Application

EMG2 Works

12.5.14. Archaeological receptors (AR1-AR6) will have been removed from the **EMG2 Works** at the construction phase. The completed development will therefore have no effect on these receptors.

12.5.15. The operational development will result in negative changes to views of The Bulwarks (AR10) Scheduled Monument due to the introduction of modern built forms within some longer-distance views from the Scheduled Monument with the surrounding landscape intruding within the wider setting of the monument. Embedded mitigation in the form of extensive bunding and landscaping planting, will reduce the level of visual intrusion. Overall, the operational phase of the **EMG2 Works** will result in a long term, low magnitude of effect on receptor (AR10), and thus a minor adverse significance of effect.

Highways Works

12.5.16. Archaeological receptor AR9 will have been removed from the **Highways Works** at the construction phase. The completed development will therefore have no effect on this receptor.

MCO Application

EMG1 Works

12.5.17. Archaeological receptors AR8 and the greater proportion of AR7 will have been retained *in-situ* and will be retained during the operational phase of the **EMG1 Works**. Due to below-ground buried nature of the receptors the completed development will have no effect on these receptors.

Operational Impacts - Built Heritage

DCO Application

- 12.5.18. Regarding the Church of St Michael and All Angels (BH1), the **EMG2 Works** will result in negative changes to views of the Church's spire from within the application site and to some longer-distance views from the surrounding landscape. The proposals will remove or alter these views, with the introduction of large-scale built form into this part of the Church's wider setting.
- 12.5.19. Notwithstanding the embedded mitigation in the form of extensive bunding and structural landscaping, the Community Park, and the retention of Hyam's Lane in its existing form (with its hedgerows), the proposals will diminish some of the rural setting of the Church and reduce the ability to appreciate its architectural interest from within the **EMG2 Works** and from within these wider rural surrounds. Overall, the operational phase will result in a short-medium term, moderate adverse magnitude of effect on receptor (BH1), and thus a moderate adverse significance of effect.
- 12.5.20. The character and appearance of Diseworth Conservation Area (BH2) is primarily derived from the historic morphology of the village and historic buildings therein. The **EMG2 Works** is a small part of the Conservation Area's setting, which itself, as a whole, provides a secondary level of contribution to the asset's significance. Consequently, the **EMG2 Works** provides a low level of contribution to the heritage importance/sensitivity of Diseworth Conservation Area.
- 12.5.21. The effect of the proposed scheme will include changes to the rural approach to the Conservation Area from the northeast (as described in relation to BH1) and changes in views

from and to the Conservation Area and in parts of the wider landscape, resulting in the alteration of an element of the it's rural setting.

12.5.22. The operation phase will, therefore, affect a portion of the wider rural setting of the Conservation Area but will not affect the Area's character and appearance in itself. Therefore, the proposed development will result in a long term, minor adverse magnitude of effect on receptor (BH2), and thus a minor adverse significance of effect.

Highway Works

12.5.23. There will not be any operational impacts to any Built Heritage asset generated by the **Highway Works**.

MCO Application

EMG1 Works

12.5.24. There will not be any operational impacts to any Built Heritage asset generated by the **EMG1 Works**.

12.6. Mitigation Measures

Archaeology

DCO Application

- 12.6.1. The assessment contained within this Chapter has identified that construction impacts in association with the **EMG2 Works** will result in a Moderate to Minor Adverse magnitude of effect in relation to receptors AR1, AR2, and AR5, and therefore indicates that a programme of archaeological investigation should be implemented to off-set the proposed impacts.
- 12.6.2. In relation to receptors AR3, AR4, and AR6, due to the Negligible adverse magnitude of effect or no impact assessed, no further mitigation measures are recommended.
- 12.6.3. In order to offset the recognised impacts to receptors AR1 and AR2, a programme of archaeological mitigation will be required. Implementation of the archaeological mitigation measures will give rise to a negligible effect on the archaeological resource during construction and operation. The archaeological mitigation will be undertaken in advance of construction works commencing. This will comprise a targeted programme of archaeological excavation focusing on receptors AR1 and AR2.
- 12.6.4. The mitigation measures will be secured through the discharge of DCO requirements process which will require a Written Scheme of Investigation (WSI) to be approved (see Requirement 13 of the draft DCO (**Document DCO 3.1**)).
- 12.6.5. In terms of the adverse effects associated with receptor (AR5), it is recommended that any mitigation measures be co-ordinated with any ecological mitigation measures identified and

controlled through the CEMP in **Appendix 3A** to this ES (**Document DCO 6.3A**) compliance with which is secured by Requirement 13 of the draft DCO (**Document DCO 3.1**).

12.6.6. The assessment contained within this Chapter has identified that construction impacts will result in no more than a short term, negligible adverse magnitude of effect to receptor AR10, therefore no further mitigation measures are recommended in regard to the construction phase. Operational impacts to AR10 will result in a minor adverse significance of effect. As set out above in regard to the assessment of operational impacts, embedded mitigation within the EMG2 Project, specifically in relation to the EMG2 Works, comprises extensive bunding and landscaping planting and a Community Park. This is set out within the Parameters Plan (Document DCO 2.5). No further mitigation measures are therefore proposed.

Highway Works

- 12.6.7. The assessment contained within this Chapter has identified that construction impacts associated with the **Highways Works** will result in a Moderate to Minor Adverse magnitude of effect in relation to receptor AR9 and therefore indicates that a programme of archaeological investigation should be implemented to off-set the proposed impacts.
- 12.6.8. The mitigation measures will be secured through the discharge of DCO requirements process which will require a Written Scheme of Investigation (WSI) to be approved (see Requirement 13 of the draft DCO (**Document DCO 3.1**)).

MCO Application

EMG1 Works

- 12.6.9. The assessment contained within this Chapter has identified that construction impacts associated with the **EMG1 Works** will result in a Minor to Negligible Adverse magnitude of effect in relation to receptor AR7 and therefore indicates that a programme of archaeological investigation should be implemented to off-set the proposed impacts.
- 12.6.10. The mitigation measures will be secured through the discharge of requirements process under the EMG1 DCO which will require a Written Scheme of Investigation (WSI) to be approved (see Requirement 13 of the EMG1 DCO).

Built Heritage

DCO Application

- 12.6.11. The assessment contained within this Chapter has identified that construction impacts associated with the **EMG2 Works** will result in no more than a short term, **negligible** adverse magnitude of effect to receptors (BH1 and BH2), therefore no further mitigation measures are recommended in regard to the construction phase.
- 12.6.12. In terms of operational impacts, the assessment within this Chapter has identified that the resultant impacts associated with the **EMG2 Works** will be a **moderate** adverse significance of effect to receptor (BH1) and a minor adverse significance of effect to receptor (BH2). As set out

above in regard to the assessment of operational impacts, embedded mitigation within the **EMG2 Works** comprises extensive bunding and structural landscaping provided through a Community Park and the retention of Hyam's Lane in its existing form (with its hedgerows). The landscape planting within the Community Park will take the form of a continuous wildflower grassland with scattered scrub and trees and surface water drainage features whilst retaining its open landscape character. Furthermore, woodland planting is proposed at the apex and the upper slopes of the mitigation mounding; a more open mosaic of scrub on the lower slope; and a wild grassland margin towards the boundary of the application site. This is set out within the Parameters Plan (**Document DCO 2.5**). No further mitigation measures are proposed.

Highway Works

12.6.13. There will not be any construction impacts to any Built Heritage assets generated by the **Highway Works**. As a result, no mitigation measures are proposed.

MCO Application

EMG1 Works

12.6.14. There will not be any construction impacts to any Built Heritage assets generated by the EMG1 Works. As a result, no mitigation measures are proposed.

12.7. Residual Effects

12.7.1. This section details the final residual effects upon archaeological and built heritage receptors after all mitigation is applied to the DCO Application and the MCO Application and then considers the EMG2 Project as a whole. The results of this assessment are set out in Table 12.5 below.

Archaeology

DCO Application

- 12.7.2. Preparation of an archaeological WSI and implementation of the associated archaeological mitigation measures as discussed in association with AR1, AR2, and AR5, above would give rise to a **negligible** residual effect on the archaeological resource during construction where effective mitigation strategies are undertaken.
- 12.7.3. The implementation of mitigation strategies would serve to further enhance the understanding of the region's archaeological record. The physical loss of buried archaeological remains would be offset through their preservation by record. As there would be no perceptible loss to the historic environment and the recording and analysis would fully realise their potential as sources of archaeological data, it is considered that the latter would fully address and mitigate the physical loss of such remains.
- 12.7.4. There will be a **negligible** residual effect on the remaining non-designated archaeological assets as all impacts will have been mitigated prior to the construction phase.
- 12.7.5. In terms of operational impacts, it has been identified that the resultant impacts will be a **minor adverse** significance of effect to receptor AR10. Embedded mitigation in the form of landscape

planting will help reduce the visibility of the proposals. This embedded mitigation will, after fifteen years, reduce the magnitude of effect to receptor AR10 to a **negligible** adverse significance of effect.

MCO Application

- 12.7.6. Preparation of an archaeological WSI and implementation of the associated archaeological mitigation measures as discussed in association with AR9, as above would give rise to a **negligible** residual effect on the archaeological resource during construction where effective mitigation strategies are undertaken.
- 12.7.7. The implementation of mitigation strategies would serve to further enhance the understanding of the region's archaeological record. The physical loss of buried archaeological remains would be offset through their preservation by record. As there would be no perceptible loss to the historic environment and the recording and analysis would fully realise their potential as sources of archaeological data, it is considered that the latter would fully address and mitigate the physical loss of such remains.

EMG2 Project

12.7.8. The residual effects in relation to archaeological receptors for the **EMG2 Project** as a whole, will be identical to those residual effects assessed individually for the DCO Application and MCO Application.

Built Heritage

DCO Application

- 12.7.9. In terms of operational impacts, the assessment within this Chapter has identified that the resultant impacts will be a **moderate** adverse significance of effect to receptor (BH1) and a **minor** adverse significance of effect to receptor (BH2).
- 12.7.10. Embedded mitigation in the form of landscape mounding and planting and the Community Park within the EMG2 Works will help reduce the proposed buildings that will be visible. In particular, the planted mounding features will screen service yards, car parks and the lower parts of the building structures. The bunded forms and landscape planting will allow only filtered views of parts of the roofscape and upper parts of the built form in the views identified above. This embedded mitigation will, after fifteen years, reduce the magnitude of effect to receptor (BH1) to a moderate-minor adverse significance of effect and reduce the magnitude of effect to receptor to receptor (BH2) to a minor-negligible adverse significance of effect.

MCO Application

- 12.6.14. In terms of operational impacts, the assessment in this Chapter has identified no resultant impacts to any built heritage receptor, including the identified BH3.
- 12.7.11. The residual effects in relation to built heritage receptors for the **EMG2 Project** as a whole, will be identical to those residual effects assessed individually for the DCO Application and MCO Application.

Table 12.5: Summary of Residual Effects

Receptor	Sensitivity	Magnitude of Effect	Proposed Mitigation	Residual Effects			
Construction Phase – DCO Application							
EMG2 Works							
AR1: Middle to Late Iron Age Peripheral Settlement Activity	Low	Moderate to Minor Adverse	Programme of archaeological fieldwork	Negligible			
AR2: Iron Age and Roman Agricultural Activity	Low	Moderate to Minor Adverse	Programme of archaeological fieldwork	Negligible			
AR3: Post-Medieval Field Boundaries	No Importance	Negligible	Not Applicable	Negligible			
AR4: Post-Medieval Ridge and Furrow	No Importance	Negligible	Not Applicable	Negligible			
AR5: Existing Post- Medieval Field Boundaries of Historic Interest	Low	Moderate to Minor Adverse	Co-ordinated with Ecological Mitigation Measures via the CEMP	Negligible			
AR6: Undated Ditches	No Importance	Negligible	Not Applicable	Negligible			
AR10: The Bulwarks Scheduled Monument	High	Negligible	Not Applicable	Negligible			
BH1: Grade II* Church of St Michael and All Angels	High	Negligible	Not Applicable	Negligible			
BH2: Diseworth Conservation Area	Moderate	Negligible	Not Applicable	Negligible			
Highway Works							
AR9: Roman Agricultural Activity	Low	Moderate to Minor Adverse	Programme of archaeological fieldwork	Negligible			
Construction Phase –	MCO Applicat	ion					
EMG1 Works							
AR7: Iron Age and Roman Agricultural Activity	Low	Minor to Negligible Adverse	Programme of archaeological fieldwork	Negligible			
AR8 Roman Agricultural Activity	Low	No Impact	Not Applicable	Negligible			

BH3: Church of St Andrew	High	No Impact	Not applicable	Negligible
Receptor	Sensitivity	Magnitude of Effect	Proposed Mitigation	Residual Effects
Operational Phase – D	CO Applicatio	'n		
EMG2 Works				
AR1: Middle to Late Iron Age Peripheral Settlement Activity	Low	No Effect	No Effect Not Applicable	
AR2: Iron Age and Roman Agricultural Activity	Low	No Effect	Not Applicable	Negligible
AR3: Post-Medieval Field Boundaries	No Importance	No Effect	Not Applicable	Negligible
AR4: Post-Medieval Ridge and Furrow	No Importance	No Effect	Not Applicable	Negligible
AR5: Existing Post- Medieval Field Boundaries of Historic Interest	Low	No Effect	Not Applicable	Negligible
AR6: Undated Ditches	No Importance	No Effect	Not Applicable	Negligible
AR10: The Bulwarks Scheduled Monument	High	Minor Adverse	Embedded Mitigation in the Form of Extensive Bunding and Landscaping Planting with 15 yrs growth	Negligible
BH1: Grade II* Church of St Michael and All Angels	High	Moderate Adverse	Embedded Mitigation in the Form of Extensive Bunding and Landscaping Planting with 15 years growth	Moderate to Minor Adverse
BH2: Diseworth Conservation Area	Moderate	Minor Adverse	Embedded Mitigation in the Form of Extensive Bunding and Landscaping Planting with 15 years growth	Minor to Negligible
Highway Works				
AR9: Roman Agricultural Activity	Low	No Effect	Not Applicable	Negligible

Operational Phase – M	CO Applicatio	on		
EMG1 Works				
AR7: Iron Age and Roman Agricultural Activity	Low	No Effect	Not Applicable	Negligible
AR8 Roman Agricultural Activity	Low	No Effect	Not Applicable	Negligible
BH3: Church of St Andrew	High	No Effect	Not Applicable	Negligible
Receptor	Sensitivity	Magnitude of Effect	Proposed Mitigation	Residual Effects
Construction Phase –	EMG2 Project			
AR1: Middle to Late Iron Age Peripheral Settlement Activity	Low	Moderate to Minor Adverse	Programme of archaeological fieldwork	Negligible
AR2: Iron Age and Roman Agricultural Activity	Low	Moderate to Minor Adverse	Programme of archaeological fieldwork	Negligible
AR3: Post-Medieval Field Boundaries	No Importance	Negligible	Not Applicable	Negligible
AR4: Post-Medieval Ridge and Furrow	No Importance	Negligible	Not Applicable	Negligible
AR5: Existing Post- Medieval Field Boundaries of Historic Interest	Low	Moderate to Minor Adverse	Co-ordinated with Ecological Mitigation Measures via the CEMP	Negligible
AR6: Undated Ditches	No Importance	Negligible	Not Applicable	Negligible
AR10: The Bulwarks Scheduled Monument	High	Negligible	Not Applicable	Negligible
BH1: Grade II* Church of St Michael and All Angels	High	Negligible	Not Applicable	Negligible
BH2: Diseworth Conservation Area	Moderate	Negligible	Not Applicable	Negligible
AR9: Roman Agricultural Activity	Low	Moderate to Minor Adverse	Programme of archaeological fieldwork	Negligible
AR7: Iron Age and Roman Agricultural Activity	Low	Minor to Negligible Adverse	Programme of archaeological fieldwork	Negligible

	1			
AR8 Roman Agricultural Activity	Low	No Impact	Not Applicable	Negligible
BH3: Church of St Andrew	High	No Impact	Not Applicable	Negligible
Operational Phase – E	MG2 Project			
AR1: Middle to Late Iron Age Peripheral Settlement Activity	Low	No Effect	Not Applicable	Negligible
AR2: Iron Age and Roman Agricultural Activity	Low	No Effect	Not Applicable	Negligible
AR3: Post-Medieval Field Boundaries	No Importance	No Effect	Not Applicable	Negligible
AR4: Post-Medieval Ridge and Furrow	No Importance	No Effect	Not Applicable	Negligible
AR5: Existing Post- Medieval Field Boundaries of Historic Interest	Low	No Effect	Not Applicable	Negligible
AR6: Undated Ditches	No Importance	No Effect	Not Applicable	Negligible
AR10: The Bulwarks Scheduled Monument	High	Minor Adverse	Embedded Mitigation in the Form of Extensive Bunding and Landscaping Planting with 15 yrs growth	Negligible
BH1: Grade II* Church of St Michael and All Angels	High	Moderate Adverse	Embedded Mitigation in the Form of Extensive Bunding and Landscaping Planting with 15 years growth	Moderate to Minor Adverse
BH2: Diseworth Conservation Area	Moderate	Minor Adverse	Embedded Mitigation in the Form of Extensive Bunding and Landscaping Planting with 15 years growth	Minor to Negligible
AR9: Roman Agricultural Activity	Low	No Effect	Not Applicable	Negligible

AR7: Iron Age and Roman Agricultural Activity	Low	No Effect	Not Applicable	Negligible
AR8 Roman Agricultural Activity	Low	No Effect	Not Applicable	Negligible
BH3: Church of St Andrew	High	No Effect	Not Applicable	Negligible

12.7.12. There will be no residual effects to archaeological and built heritage receptors in relation to the DCO Application **Highways Works**, and the MCO Application **EMG1 Works**.

13. Cumulative Effects

- 13.1.1. In regard to intra-project effects, no effects have been identified. This includes the proposed landscaped bunds that, due to the layered nature of their planting, will offer no intra site effects on the identified built heritage receptors.
- 13.1.2. In regard to inter-project effects, the cumulative effects from other development sites which are in proximity to the site and listed within Chapter 21: Cumulative Impacts (Document DCO 6.21/MCO 6.21). A review of the developments listed indicate that they will have no effect on the identified heritage assets.

13.2. Summary of Effects and Conclusions

13.2.1. This Chapter has considered the likely significant effects of the **EMG2 Project** upon cultural heritage receptors (both archaeological and built heritage) during its construction and operation.

DCO Application

- 13.2.2. Following the implementation of mitigation measures associated with the DCO Application comprising a programme of archaeological works, it is considered that there will be no significant effects upon archaeological receptors; the programme of works will offset the physical loss of archaeological remains within the DCO Order Limits. The programme of works will be secured by an appropriately worded requirement within the DCO (see Requirement 13 of the draft DCO (**Document DCO 3.1**)).
- 13.2.3. Following the inclusion of embedded mitigation measures it is considered that, after a fifteenyear period, development associated with the DCO Application will have no significant effects upon designated built heritage or archaeological receptors.

MCO Application

13.2.4. Following the implementation of mitigation measures associated with the MCO Application comprising a programme of archaeological works, it is considered that there will be no significant effects upon archaeological receptors; the programme of works will offset the physical loss of archaeological remains within the MCO Order Limits. The programme of works will be secured by the existing requirement 13 within the EMG1 DCO.

13.2.5. Following the inclusion of embedded mitigation measures it is considered that, after a fifteenyear period, that development associated with the MCO Application will have no significant effects upon designated built heritage or archaeological receptors.

The EMG2 Project

- 13.2.6. Following the implementation of mitigation measures comprising a programme of archaeological works, it is considered that the EMG2 Project will have no significant effects upon archaeological receptors; the programme of works will offset the physical loss of archaeological remains within the limits of the DCO Application and the MCO Application. The programme of works can be secured by an appropriately worded requirement within the DCO (please see Requirement 13) and the existing EMG1 DCO requirement for the MCO Application.
- 13.2.7. Following the inclusion of embedded mitigation measures it is considered that, after a fifteenyear period, that development associated with the DCO Application will have no significant effects upon designated built heritage or archaeological receptors.

Cumulative Effects

13.2.8. A review of both inter-project effects and intra-project effects associated with the **EMG2 Project** have not identified any effects to known heritage receptors.

Receptor	Sensitivity	Magnitude of Impact	Magnitude of Effect	Proposed Mitigation	Residual Effects
Construction Phase	e – DCO Appli	cation			
EMG2 Works					
AR1: Middle to Late Iron Age Peripheral Settlement Activity	Low	High	Moderate to Minor Adverse	Programme of archaeological fieldwork	Negligible
AR2: Iron Age and Roman Agricultural Activity	Low	High	Moderate to Minor Adverse	Programme of archaeological fieldwork	Negligible
AR3: Post-Medieval Field Boundaries	No Importance	High	Negligible	Not Applicable	Negligible
AR4: Post-Medieval Ridge and Furrow	No Importance	High	Negligible	Not Applicable	Negligible
AR5: Existing Post- Medieval Field Boundaries of Historic Interest	Low	High	Moderate to Minor Adverse	Co-ordinated with Ecological Mitigation Measures via the CEMP	Negligible
AR6: Undated Ditches	No Importance	High	Negligible	Not Applicable	Negligible

Table 12.6: Summary of Effects

AR10: The Bulwarks Scheduled Monument	High	Negligible	Negligible	Not Applicable	Negligible
BH1: Grade II* Church of St Michael and All Angels	High	Negligible	Negligible	Not Applicable	Negligible
BH2: Diseworth Conservation Area	Moderate	Negligible	Negligible	Not Applicable	Negligible
Highway Works					
AR9: Roman Agricultural Activity	Low	High	Moderate to Minor Adverse	Programme of archaeological fieldwork	Negligible
Construction Phase	e – MCO Appli	cation			
EMG1 Works					
AR7: Iron Age and Roman Agricultural Activity	Low	Low	Minor to Negligible Adverse	Programme of archaeological fieldwork	Negligible
AR8 Roman Agricultural Activity	Low	No Impact	No Impact	Not Applicable	Negligible
BH3: Church of St Andrew	High	No Impact	No Impact	Not Applicable	Negligible
Receptor	Sensitivity	Magnitude of Impact	Magnitude of Effect	Proposed Mitigation	Residual Effects
Operation Phase –	DCO Applicati	on			
EMG2 Works					
AR1: Middle to Late Iron Age Peripheral Settlement Activity	Low	No Effect	No Effect	Not Applicable	Negligible
AR2: Iron Age and Roman Agricultural Activity	Low	No Effect	No Effect	Not Applicable	Negligible
AR3: Post-Medieval Field Boundaries	No Importance	No Effect	No Effect	Not Applicable	Negligible
AR4: Post-Medieval Ridge and Furrow	No Importance	No Effect	No Effect	Not Applicable	Negligible
AR5: Existing Post- Medieval Field Boundaries of Historic Interest	Low	No Effect	No Effect	Not Applicable	Negligible
AR6: Undated Ditches	No Importance	No Effect	No Effect	Not Applicable	Negligible

AR10: The Bulwarks Scheduled Monument	High	Low Adverse	Minor Adverse	Embedded Mitigation in the Form of Extensive Bunding and Landscaping Planting with 15 years growth	Negligible
BH1: Grade II* Church of St Michael and All Angels	High	Moderate Adverse	Moderate Adverse	Embedded Mitigation in the Form of Extensive Bunding and Landscaping Planting with 15 years growth	Moderate to Minor Adverse
BH2: Diseworth Conservation Area	Moderate	Minor Adverse	Minor Adverse	Embedded Mitigation in the Form of Extensive Bunding and Landscaping Planting with 15 years growth	Minor to Negligible
Highway Works					
AR9: Roman Agricultural Activity	Low	No Effect	No Effect	Not Applicable	Negligible
Operation Phase –	MCO Applicat	ion			
EMG1 Works					
AR7: Iron Age and Roman Agricultural Activity	Low	No Effect	No Effect	Not Applicable	Negligible
AR8 Roman Agricultural Activity	Low	No Effect	No Effect	Not Applicable	Negligible
BH3: Church of St Andrew	High	No Effect	No Effect	Not Applicable	Negligible
Construction Phase	e – EMG2 Proj	ect			
AR1: Middle to Late Iron Age Peripheral Settlement Activity	Low	High	Moderate to Minor Adverse	Programme of archaeological fieldwork	Negligible
AR2: Iron Age and Roman Agricultural Activity	Low	High	Moderate to Minor Adverse	Programme of archaeological fieldwork	Negligible
AR3: Post-Medieval Field Boundaries	No Importance	High	Negligible	Not Applicable	Negligible
AR4: Post-Medieval Ridge and Furrow	No Importance	High	Negligible	Not Applicable	Negligible
AR5: Existing Post- Medieval Field	Low	High	Moderate to Minor Adverse	Co-ordinated with Ecological Mitigation	Negligible

Boundaries of Historic Interest				Measures via the CEMP	
AR6: Undated Ditches	No Importance	High	Negligible	Not Applicable	Negligible
AR10: The Bulwarks Scheduled Monument	High	Negligible	Negligible	Not Applicable	Negligible
BH1: Grade II* Church of St Michael and All Angels	High	Negligible	Negligible	Not Applicable	Negligible
BH2: Diseworth Conservation Area	Moderate	Negligible	Negligible	Not Applicable	Negligible
AR9: Roman Agricultural Activity	Low	High	Moderate to Minor Adverse	Programme of archaeological fieldwork	Negligible
AR7: Iron Age and Roman Agricultural Activity	Low	Low	Minor to Negligible Adverse	Programme of archaeological fieldwork	Negligible
AR8 Roman Agricultural Activity	Low	No Impact	No Impact	Not Applicable	Negligible
BH3: Church of St Andrew	High	No Impact	No Impact	Not Applicable	Negligible
Receptor	Sensitivity	Magnitude of Impact	Magnitude of Effect	Proposed Mitigation	Residual Effects
Operation Phase –	EMG2 Project				
AR1: Middle to Late Iron Age Peripheral Settlement Activity	Low	No Effect	No Effect	Not Applicable	Negligible
AR2: Iron Age and Roman Agricultural Activity	Low	No Effect	No Effect	Not Applicable	Negligible
AR3: Post-Medieval Field Boundaries	No Importance	No Effect	No Effect	Not Applicable	Negligible
AR4: Post-Medieval Ridge and Furrow	No Importance	No Effect	No Effect	Not Applicable	Negligible
AR5: Existing Post- Medieval Field Boundaries of Historic Interest	Low	No Effect	No Effect	Not Applicable	Negligible
AR6: Undated Ditches	No Importance	No Effect	No Effect	Not Applicable	Negligible
AR10: The Bulwarks Scheduled Monument	High	Low Adverse	Minor Adverse	Embedded Mitigation in the Form of Extensive Bunding and Landscaping	Negligible

				Planting with 15 years growth	
BH1: Grade II* Church of St Michael and All Angels	High	Moderate Adverse	Moderate Adverse	Embedded Mitigation in the Form of Extensive Bunding and Landscaping Planting with 15 years growth	Moderate to Minor Adverse
BH2: Diseworth Conservation Area	Moderate	Minor Adverse	Minor Adverse	Embedded Mitigation in the Form of Extensive Bunding and Landscaping Planting with 15 years growth	Minor to Negligible
AR9: Roman Agricultural Activity	Low	No Effect	No Effect	Not Applicable	Negligible
AR7: Iron Age and Roman Agricultural Activity	Low	No Effect	No Effect	Not Applicable	Negligible
AR8 Roman Agricultural Activity	Low	No Effect	No Effect	Not Applicable	Negligible
BH3: Church of St Andrew	High	No Effect	No Effect	Not Applicable	Negligible