OAKLANDS FARM SOLAR PARK

Applicant: Oaklands Farm Solar Ltd

Environmental Statement
Chapter 7 – Historic Environment
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Oaklands Farm Solar Park - Environmental Statement Volume 1

Chapter 7: Historic Environment

Final report
Prepared by LUC
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Chapter 7
Historic Environment

Introduction

7.1 This chapter of the Environmental Statement (ES) considers the potential effects of the Proposed Development on the historic environment[1] and its component heritage assets. It details the assessment methodology, the baseline conditions currently existing at the Site and surroundings, likely significant environmental effects, mitigation measures required to prevent, reduce or offset any significant adverse effects, and the likely residual effects after these measures have been employed.

7.2 The historic environment assessment was undertaken by LUC.

7.3 This chapter is supported by **Figure 7.1: Heritage Assets Identified as Potentially Susceptible to Effects** in **Volume 2** and the following appendices in **Volume 3**:

- **Appendix 7.1: Historic Environment Assessment (HEA)** which includes figures showing the location of assets discussed in this chapter.
- **Appendix 7.2: Geophysical Survey Report**. This is a report on the survey of the sections of the Site where fixed infrastructure (i.e. panel array, substation, battery storage and cable routes) is proposed.

7.4 Consideration of hedges within the Site, against the historical criteria of the Hedgerow Regulations, is included within **Appendix 6.15: Important Hedgerow Assessment**.

[1] The EIA Regulations require an applicant to explain the significant effects to archaeology and cultural heritage. In English planning policy and guidance this equates to the 'historic environment' policy area.

Scope of the Assessment

Effects Assessed in Full

7.5 The following effects were identified at the scoping stage for consideration in this assessment:

- Effects to heritage assets, during construction, arising from:
  - Physical change to assets lying within the Site;
  - Change in the setting of assets within the Site and study areas.
- Effects to heritage assets, during operation, resulting from the presence of the Proposed Development within their setting.
- Cumulative effects to heritage assets during operation resulting from the presence of the Proposed Development and cumulative schemes within their setting.

Effects Scoped Out

7.6 On the basis of the desk based and field survey work undertaken, the professional judgement of the EIA team, experience from other relevant projects and policy, guidance or standards, and feedback received from consultees, the following topic areas have been 'scoped out' of detailed assessment, as proposed in the Scoping Report and agreed by PINS in their Scoping Opinion:

- Cumulative effects to heritage assets during construction.
- Direct physical effects during operation (since physical effects will only occur during construction).
- Direct physical effects to assets beyond the Proposed Development footprint.
- Effects related to setting change for all heritage assets lying beyond the study areas (study areas have been aligned to PINS requests).

Assessment Methodology

Legislation, Policy and Guidance

Legislation

7.7 This assessment is carried out in accordance with the following legislation:

- Ancient Monuments and Archaeological Areas Act 1979[2].
- Planning (Listed Buildings and Conservation Areas) Act 1990[3].

Policy

7.8 This assessment is carried out in accordance with the principles contained within the following policy:

- Department for Energy and Climate Change. 2011. Overarching National Policy Statement (NPS) for Energy (EN-1)[4].
- Department for Energy and Climate Change. 2011. National Policy Statement for Renewable Energy Infrastructure (EN-3)[5].
- Department for Energy and Climate Change. 2011. National Policy Statement for Electricity Networks Infrastructure (EN-5)[6].

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[2] Ancient Monuments and Archaeological Areas Act (1979) Available at: https://www.legislation.gov.uk/ukpga/1979/46 [Accessed 29/09/23]

[3] Planning (Listed Buildings and Conservation Areas) Act (1990) Available at: https://www.legislation.gov.uk/ukpga/1990/9/contents [Accessed 29/09/23]

[4] Department for Energy and Climate Change (2011) Overarching National Policy Statement for Energy (EN-1). Available at: https://assets.publishing.service.gov.uk/media/5a79522de5274a2acd18bd53/1938-overarching-nps-for-energy-en1.pdf [Accessed 29/09/23]

[5] Department for Energy and Climate Change (2011) National Policy Statement for Renewable Energy Infrastructure (EN-3). Available at: https://assets.publishing.service.gov.uk/media/5a79c422e5274a684690bf53/1940-nps-renewable-energy-en3.pdf [Accessed 29/09/23]

[6] Department for Energy and Climate Change (2011) National Policy Statement for Electricity Networks Infrastructure (EN-5) Available at:

- National Planning Policy Framework (NPPF)[7].

7.9 Although the Energy NPS predate adoption of the NPPF, their content and tests with regard to the historic environment are fundamentally the same as those of the NPPF.[8]

7.10 The November 2023 draft NPSs to be designated include no new provisions regarding this topic. The draft NPS EN-1 to be designated[9] includes clarification of sources of effects to heritage assets from energy developments and states that these sources of effects are to be covered in Applicant's assessments[10]. The draft NPS EN-3 to be designated[11] includes a specific section on the kinds of effect that can arise to heritage assets and the kinds of assessment, design intervention and mitigation that may be required (from paragraph 2.10.107 to 2.10.119). This largely repeats ground covered in EN-1 and the relevant topic guidance currently in operation (see list at paragraph **7.11** below).

Guidance

7.11 This assessment is carried out in accordance with the principles contained within the following documents:

- National Planning Practice Guidance: Historic Environment (hereafter 'PPG')[12].

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https://assets.publishing.service.gov.uk/media/5a74877840f0b61938c7e2d9/1942-national-policy-statement-electricity-networks.pdf [Accessed 29/09/23]

[7] Department for Levelling Up, Housing and Communities (2023) National Planning Policy Framework. Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2 [Accessed 29/09/23]

[8] Both derived from Planning Policy Statement 5: Planning for the Historic Environment (2010)

[9] Department for Energy Security and Net Zero (2023) Draft Overarching National Policy Statement for Energy (EN-1) Available at: https://assets.publishing.service.gov.uk/media/655dc190d03a8d001207fe33/overarching-nps-for-energy-en1.pdf [Accessed 16/01/24]

[10] EN-1 Consultation Draft, para. 5.9.12 references "noise, vibration, light and indirect impacts" as potential sources of effects to heritage assets.

[11] Department for Energy Security and Net Zero (2023) Draft National Policy Statement for Renewable Energy Infrastructure (EN-3). Available at: https://assets.publishing.service.gov.uk/media/655dc352d03a8d001207fe37/nps-renewable-energy-infrastructure-en3.pdf [Accessed 16/01/24]

[12] Ministry of Housing, Communities & Local Government (2019) Planning Practice Guidance: Historic Environment.

- Principles of Cultural Heritage Impact Assessment in the UK[13] (hereafter 'PCHIA Guidance').
- Managing Significance in Decision-Taking in the Historic Environment: Historic Environment Good Practice Advice in Planning Note 2[14] (hereafter 'GPA 2').
- The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3[15] (hereafter 'GPA 3').
- Conservation Principles, Policies and Guidance for the sustainable management of the historic environment[16] (hereafter 'Conservation Principles').
- Standard and Guidance for historic environment desk-based assessment[17].

Consultation

7.12 In undertaking the assessment, consideration has been given to the scoping responses and other consultation which has been undertaken as detailed in **Table 7.1**.

[13] IEMA (Institute of Environmental Management and Assessment), IHBC (Institute of Historic Building Conservation), Chartered Institute for Archaeologists (CIfA) (2021) Principles of Cultural Heritage Impact Assessment In The UK.

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

[15] Historic England (2017) The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3.

[16] English Heritage (2008) Conservation Principles, Policies and Guidance for the sustainable management of the historic environment.

[17] CIfA 2017 Standard and Guidance for historic environment desk-based assessment.

Table 7.1: Consultation Responses

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
Planning Inspectorate September 2021	Scoping Opinion	Agree with the scoping out direct physical effects during operation and that significant effects to assets beyond the Proposed Development from direct physical effects during construction or operation can be scoped out in relation to the Historic Environment.	The ES has been undertaken in line with this scope.
		Advised the ES should include an assessment on heritage assets beyond the study area where there is potential for significant effects as 2.5km study area is based upon the ZTV which is not yet finalised.	A core study area[18] has been used to assess potential for effects related to setting change in both designated and non-designated heritage assets. A wider study area[19] has been used to assess potential for effects related to setting change in

[18] 2.5km from the Site boundary.

[19] 2.5 to 5km from the Site boundary.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
			designated heritage assets. These study areas are in line with the likely zone over which visual effects may occur as established by the LVIA.
		The ES should confirm which areas of the site have been subject to geophysical survey and justification should be provided as to why these locations were selected and should also justify why a 50m transect is considered appropriate for a site which is 177 hectares.	There appears to have been a misunderstanding on the geophysical survey within the site discussed in the Scoping Report. That survey was undertaken several years ago and is wholly unrelated to this scheme. It is not intended that it would provide supporting evidence for determination of this application and was mentioned as it forms part of the baseline information supplied by the local Historic Environment Record (hereafter 'HER'). Its findings have been used in the same way that other HER information has been used as part of desk-based assessment to

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
			develop understanding of the site. Discussion has been held with the DCC Archaeologist, as archaeological advisor to SDDC, regarding any further fieldwork (e.g. geophysical survey) required to support this application (see consultation entry below for DCC Archaeologist, November 2021).
		The ES should describe any trial trenching which has been undertaken.	Noted. No pre-submission trial trenching has been undertaken as agreed with DCC (see below within this table: DCC Archaeologist April 2023).
		The ES should contain photomontages to demonstrate the visual impact of the Proposed Development on the setting of all affected cultural heritage assets. Agreement should be sought in consultation with Historic England and the local authority on the locations for	Consultation with appropriate consultees (e.g. SDDC conservation officer, Historic England) was undertaken following the PEIR which established that no assets required visualisations due to the scaling back of the scheme following the PEIR.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		photomontages as visual representations of the Proposed Development.	
		Mitigation measures should be considered where likely adverse significant effects could arise from pre-construction, construction or operation stages on non- designated assets. All identified mitigation measures should be fully described in the ES and demonstrably secured.	Outline considerations on mitigation are included in the ES and will be subject to further consultation with the relevant consultee (e.g. DCC Archaeologist). The scope of any archaeological works required, whether to be undertaken as advance works or during the construction period, will be laid out in a Written Scheme of Investigation (WSI) secured through a requirement in the DCO under advice from DCC's Archaeological officer and, if relevant (i.e. buried heritage assets of equivalent importance to scheduled monuments), Historic England. Measures covering any

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
			construction period mitigation are outlined within the CEMP.
DCC September 2021	Response to Scoping Consultation	Noted DCC are content with the scope of the Historic Environment assessment.	The ES has been undertaken in line with this scope.
Historic England September 2021	Response to Scoping Consultation	Advised against a default fixed radius approach to the consideration of setting impacts in advance or more work to undertake the specific setting sensitivity of assets and should be reviewed in the context of initial results.	See response to points on study areas from PINS above. The extent of likely effects was kept under review during preparation of the ES and no further susceptible assets were identified beyond 5 km.
		Recommended the inclusion of long views and any specific designed or historically relevant views and vistas within historic landscapes and consideration of inter-visibility, or otherwise associated heritage assets, in which both assets and the development can be seen.	These aspects are included as part of the assessment of effects related to setting change, see 'Assessment of Operational Effects' section below and **Appendix 7.1** 'Potential development impacts' section.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		Advised that Levels of Importance is used rather than Levels of Significance.	This terminology has been adopted and reflects the relatively recently published (July 2021) PCHIA Guidance.
		Advised that the proposed effects levels are broken down into sub-categories as the proposed approach tends to a skewed distribution and does not allow for a sufficient range of impacts.	The terminology used has been reviewed. The adopted terminology allows for clear identification of the level of effects assets would experience both in NPS terms and in terms of whether or not this is significant effect in the context of the EIA Regulations.
		Desk based assessment including HER consultation, Lidar, cartographic sources, previous survey etc should inform extensive new geophysical survey; in respect of this work and further intrusive investigations we refer you to County archaeological advice.	Desk-based sources, including the sources cited by HE, and walkover field survey have been used in preparation of the ES. Discussions were held with the DCC Archaeologist on the scope of a geophysical survey required to support the application (see consultation entry below for DCC Archaeologist November 2021).

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
SDDC September 2021	Response to Scoping Consultation	No general issues with the 2.5km study area as proposed subject to some mention of Brizlincote Hall being made. Beyond that, the approach and level of detail proposed all seems reasonable. Given the scale of the proposal officers are particularly concerned about the impact on setting of Walton on Trent Conservation Area, also the list of potential mitigation doesn't include anything that might mitigate visual impacts on setting of assets. That being said, any attempt to screen visual impacts would result in screening, the scale of which might itself have adverse impacts of its own.	Brizlincote Hall lies in the wider study area so the potential for effects to it as a result of setting change has been reviewed as part of baseline studies. Walton-on-Trent lies within the core study area so has been considered for potential effects related to setting change. Where mitigation measures have been suggested for effects related to setting change, consideration has been given to the screening measures, such as plantation of woodland at the Site fringes, could be a source of such effects in their own right.
DCC Archaeologist November 2021	Post-scoping consultation via email	Advised that the results of a geophysical survey will be required to inform the ES. The results of this survey can be used as the basis to develop detailed mitigation measures.	The scope of this survey was designed in consultation with the DCC Archaeologist. The survey results are reported in

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
			Appendix 7.2: Geophysical Survey Report.
Natural England September 2021	Response to Scoping Consultation	The Applicant should consider whether there is land in the area affected by the Proposed Development which qualifies for conditional exemption from capital taxes on the grounds of outstanding scenic, scientific or historic interest.	Checks have been made, using HM Customs 'Land, buildings and their contents' search tool[20], for exempt land – none lies within the lies within the Site or study areas. The Proposed Development has no implications for any conditionally exempt properties.
Drakelow PC August 2021	Response to Scoping Consultation	Do not agree with any parameters associated with the Historic Environment in which they live being scoped out of the ES.	The elements which have been scoped out are standard practice for this kind of development and reflect the fact that it will not generate the effects which have been scoped out. This has been accepted by the relevant consultees on this topic (Historic

[20] HM Customs (no date) Land, buildings and their contents search tool. Available at: http://www.hmrc.gov.uk/gds/heritage/lbsearch.htm [Access 29/09/23]

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
			England, Derbyshire County Council Archaeological Officer, South Derbyshire District Council Conservation Officer).
Rosliston PC and Walton-on-Trent PC September 2021	Response to Scoping Consultation	Advised the study area for historic environment should be aligned with that for landscape and visual (5km).	Study Areas have been kept under review during the course of the ES and effects to designated assets lying up to 5km from the Site are considered.
DCC Archaeologist April 2023	Post-scoping consultation via telephone and email	Discussed timings for the DCO application, interim results of geophysical survey and likely need for any further fieldwork (e.g. evaluation by trial trenching) to inform the DCO application. At time of consultation, the DCC archaeologist was comfortable that this could be post-consent as initial research and geophysical survey results	The completed geophysical survey report is **Appendix 7.2: Geophysical Survey Report**. Further consultation is to be carried out with the DCC archaeologist on the need for and scope of any post-consent fieldwork.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
		were not indicate the presence of significant or extensive buried heritage assets.	

Study Area

7.13 A study area is required for this topic, both to provide context in which to interpret the heritage assets within the Site which may be subject to direct, physical effects but also to understand which assets may experience effects due to the presence of the Proposed Development within their setting. The latter is informed by understanding the extent over which the Proposed Development may be visible and the degree of this visibility. The Proposed Development ZTVs have been reviewed in setting study areas. Liaison with the specialists undertaking the LVIA for the Proposed Development since scoping indicated that significant visual effects will be confined to within 2.5 km of the Site. A Core Study Area, encompassing land lying within 2.5km of the Site, has, therefore, been used for contextual data gathering and identification of designated and non-designated heritage assets which may be subject to effects related to setting change. A Wider Study Area, encompassing land lying 2.5km to 5km from the Site, has been used to identify any further designated heritage assets susceptible to effects related to setting change[21]. Study Areas are shown in **Appendix 7.1: Historic Environment Assessment**, Figure B.

Desk Based Research and Data Sources

7.14 The following data sources have informed the assessment:

- The National Heritage List for England (NHLE).
- Local council sources, including conservation area appraisals and local lists.
- DCC Historic Environment Record (HER) data[22].
- Staffordshire County Council (SCC) Historic Environment Record (HER)[23].
- Cartographic Sources – historic and modern Ordnance Survey mapping at various scales.
- Geophysical survey report (see **Appendix 7.2: Geophysical Survey Report**).

[21] E.g. assets – such as parklands, county houses or commemorative monuments, where aspects of their significance relates to designed views.

[22] DCC HER reference CDR11692, search results received 10/06/2021.

[23] SCC HER search results received 22/07/2021.

- British Geological Survey (BGS) geological mapping.
- Online aerial imagery and Lidar data.
- Archival, published, and online sources.
- Design proposals for the Proposed Development.
- Site visits.

7.15 Further detail of sources used can be found within **Appendix 7.1: Historic Environment Assessment (HEA)**.

Field Survey

7.16 The following field surveys were carried out to inform the assessment:

- Visits to assets in the site vicinity assessed as susceptible to effects related to setting change – 15th to 16th November 2021. Detail on locations visited is included in **Appendix 7.1: Historic Environment Assessment (HEA)**. Conditions were overcast with good visibility.
- Site walkover survey – 16th November 2021. Conditions were dry with initial mist clearing to an overcast day with good visibility. Results of the site walkover are contained in **Appendix 7.1: Historic Environment Assessment (HEA)**.
- Geophysical Survey – this was undertaken in three survey tranches (June 2022, October 2022 and August to September 2023) due to restrictions on site access associated with the state of crops grown in the survey fields. The survey results are reported on in **Appendix 7.2: Geophysical Survey Report**.

Assessment framework

7.17 NPS EN-1 and the PPG establish that it is the effect of proposed change, including development, upon the significance of a heritage asset which is the key consideration in the decision-making process. The significance of a heritage asset is hereafter referred to as ‘heritage significance’ to avoid confusion with the use of word ‘significance’ elsewhere in the ES as part of the impact assessment process (e.g. ‘significance of effect’).

7.18 The key policy tests in deciding applications regarding heritage assets are whether or not a proposal will cause harm to the significance of heritage assets and what weight should be given to any such harm. Harm is defined as adverse effects to the significance of a heritage asset as a result of natural processes and/or human agency. Substantial harm is defined, with reference to the PPG, as change or changes which either remove altogether, or very much reduce, a heritage asset's significance[24].

7.19 There is no statutory or otherwise standard accepted methodology for the assessment of effects to heritage assets in an EIA context. The PCHIA Guidance outlines the following elements of assessment to explain how assets are affected by development and can be used in an EIA context:

- Understanding the asset/s affected, comprising:
  - describing the asset;
  - ascribing cultural significance; and
  - attributing importance.
- Evaluating the consequences of change:
  - understanding change;
  - assessing impact; and
  - weighting the effect.

7.20 This guidance supports a narrative approach to describing effects to heritage assets, in line with the requirements of the NPPF (which mirror those in NPS EN-1) and guidance from Historic England[14,15]. The following staged approach draws on the considerations outlined in GPAs 2 & 3 and is in line with the PCHIA guidance. The stages of assessment are:

- Step 1 – Identify which heritage assets may be affected by the proposed development.
- Step 2 – Explain the heritage significance and level of importance of the potentially affected assets, including the role of their setting.
- Step 3 – Explain the effect of the proposed development upon their heritage significance.

[24] PPG, although post-dating the NPS, serves as guidance to the policy statement as a function of footnote 121 (which identifies the then-current PPS5 Practice Guidance, or any successor document, as a source of information).

- Step 4 – Explore measures to reduce or avoid likely effects and any opportunities to better reveal or enhance significance.
- Step 5 – Describe the overall effects upon heritage assets following the application of mitigation and enhancement measures.

7.21 The results of Steps 1 and 2 are presented in the 'Baseline Conditions' section of this chapter and are supported by the baseline data collection outlined above. They represent the 'Understanding the asset' stage of the PCHIA Guidance.

7.22 Step 3 is informed by review of the nature of the assets and proposed project plans and parameters and is reported in the 'Assessment of Effects' section. It represents the 'Evaluating the consequences of change: understanding change and assessing impact' stages of the PCHIA guidance.

7.23 Step 4 consists of any proposed mitigation or enhancement measures developed after finalisation of the design of the proposed project. Appropriate mitigation and enhancement measures to address effects to heritage assets are described in the section on 'Proposed Mitigation'.

7.24 Step 5 explains the likely effect to heritage assets following the application of mitigation measures and is reported in 'Assessment of Effects'. It represents the 'Evaluating the consequences of change: understanding change and assessing impact' stages of the PCHIA guidance to explain residual effects and the 'Evaluating the consequences of change: weighting the effect' stage of the PCHIA guidance.

Importance (Receptor value)

7.25 The importance of an asset is established with reference to its heritage significance, whether it is designated, or would meet criteria for designation, and/or what scale of importance it has (i.e. international, national, regional, local). The importance of an asset equates to 'receptor value' in common EIA terminology so 'value' is used for this criterion within this chapter. The level of receptor value is supported by a narrative description of heritage significance, articulated in accordance with Conservation Principles.[16] Conservation Principles explains heritage significance as comprising the following heritage values:

- Evidential value – the potential of a place to yield evidence about past human activity.

- Historical value – the ways in which past people, events and aspects of life can be connected through a place to the present.
- Aesthetic value – the ways in which people draw sensory and intellectual stimulation from a place.
- Communal value – the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory.

7.26 These values stem from the physical form and nature of the asset and how it is perceived and understood. As such, the setting of an asset can contribute actively to these values and, in doing so, to its heritage significance. It should be noted that not all heritage assets will possess each of these values and that lacking a category of value, such as an asset having no aesthetic value does not mean it is of a lesser heritage significance.

7.27 The values shown in **Table 7.2** are ascribed to the heritage assets (receptors) under consideration.

Table 7.2: Importance (Receptor Value) criteria

Importance	Description
High	Designated heritage assets. Non-designated heritage assets which can be shown to meet the criteria for designation
Medium	Non-designated heritage assets of regional importance (including as established with reference to Regional Archaeological Research Frameworks).
Low	Non-designated heritage assets of local importance.
Very Low	Non-designated heritage assets of local importance but with limited surviving significance, e.g. as a result of subsequent and extensive harmful modification.

Effect

7.28 The effect to the asset is expressed with reference to the degree of harm that it will experience. NPS EN-1 outlines three levels of harm: total loss, substantial harm and less than substantial harm. This may be understood as the overall effect to an asset and equates most closely to an extent to the concept of 'significance of effect' used in other EIA chapters within this ES. In PCHIA guidance terms this equates to the level of impact.

7.29 The levels of effect defined in **Table 7.3** are used in discussion of the Proposed Development's effects to heritage assets. The level of effect is supported by a textual description of how the Proposed Development will affect the receptor's heritage significance. For each effect recorded, a statement is made as to whether the effect constitutes a significant effect in in the context of the EIA Regulations. Without prejudice to the findings of the assessment, total loss or substantial harm to a High value heritage asset, i.e. a designated heritage asset or non-designated asset of demonstrably equivalent value, will be considered to be a significant effect. The assessment of effects relies on professional judgement, applying relevant professional and technical guidance as outlined above.

Table 7.3: Level of change criteria

Effect	Description
Total loss	Removal of the entire heritage asset.
Substantial harm	Change or changes which either remove altogether or very much reduce the asset's heritage significance.
Less than substantial harm	Change or changes which adversely affect but do not remove altogether or very much reduce the asset's heritage significance.
Neutral	The Proposed Development will leave the asset's heritage significance unaffected.
Beneficial	The Proposed Development will enhance the asset's heritage significance.

7.30 Decision making under the NPS regime requires application of the tests set out in paragraphs 5.8.11 - 5.8.18 of the 2011 NPS EN-1 (paragraphs 5.9.22 to 5.9.36 in the November 2023 draft NPS EN-1 to be designated) and, where listed buildings and conservation areas are involved, the tests from the Planning (Listed Buildings and Conservation Areas) Act 1990[25]. In PHCIA terms this equates to the weight to be given to effects to assets (Evaluating the consequences of change: weighting the effect) and is properly a matter for the decision maker. Where an asset would experience an effect the assessment of effects includes which policy or legislative test is engaged as part of the closing summary of the effect.

Assessment Limitations

7.31 Much of the information used by this study consists of secondary information compiled from a variety of sources. The assumption is made that this information is reasonably accurate unless otherwise stated.

7.32 Initial desk-based research was undertaken during the COVID-19 lockdown so material held by local archives could not be consulted. Alternative sources of key archival material, namely tithe awards and maps and historic Ordnance Survey mapping, were used to inform production of this report instead. The key sources have been consulted for the preparation of the PEIR, and subsequently this ES chapter and supporting HEA.

7.33 Fields within the Site which were under crop at the time of the walkover survey were inspected from field margins and tracks, rather than subject to full walkover. It is not considered that this has impaired identification of heritage assets within the Site since other sources (LiDAR, conventional aerial photography) are available as other sources from which assets can be identified.

7.34 Whilst the information gaps above are acknowledged, it is considered that there is sufficient information to enable an informed decision to be taken in relation to the identification and assessment of likely significant environmental effects on the historic environment.

[25] i.e. Section 66 - special regard to the preservation of listed buildings and their settings; Section 72 preserve or enhance the character or appearance of conservation areas.

Baseline Conditions

Archaeological and historical context

7.35 A full discussion of the archaeological and historical background of the Site and study areas is presented in **Appendix 7.1: Historic Environment Assessment (HEA)**. It is summarised here to provide context to the heritage assets identified as being potentially susceptible to effects arising from the Proposed Development.

7.36 The Site is located on the undulating watershed between the valleys of the Rivers Trent and Mease. The River Trent lies c.1km west of the site and ground level within the Site is c. 20 to 40m higher than the Trent floodplain.

7.37 Extensive prehistoric landscapes, including ritual elements, have been recorded by archaeological fieldwork on the River Trent floodplain. Many of these heritage assets were discovered and then removed through quarrying for aggregates, e.g. around Catholme and Alrewas. Several of the surviving prehistoric ritual heritage assets are Scheduled Monuments. There are far fewer records of past human activity away from the floodplain. The nature of land cover away from the floodplain may, in part, explain lower levels of recorded assets[26] but the high level of archaeological scrutiny which the River Trent floodplain has had may also explain the greater density of assets and records on the floodplain. Geophysical survey of the Site did not identify any anomalies[27] indicative of prehistoric activity.

7.38 Roman-period activity is also recorded in the Site and its environs. Ryknild Street, the Roman road from Chester (*Deva*) to Derby (*Derventio*), forms the predecessor of the main arterial route through the area, the present A38.[28] The projected course of a possible Roman Road, running between Ibstock in Leicestershire and Ryknild Street, runs though the northern tip of the site. Geophysical survey was undertaken in this part of the Site as it coincides with the cable route to the Drakelow substation connection. No indication of the presence of a Roman

[26] i.e. more areas are under permanent pasture so are less liable to produce cropmarks from which below-ground heritage assets can be detected.

[27] Variations in the resistivity of the ground from what would be encountered due to the geology and soils present.

[28] References to the name and course of this route vary so the Staffordshire HER rendering of the road name and course has been adopted in the ES and supporting HEA.

Road was found by the survey so it is possible that the road took a more northerly course to cross the River Trent.

7.39 Records from the immediate vicinity of the Site appear to conform to the general pattern of a greater concentration of assets and findspots on the floodplain compared to the valley sides and watersheds. There are several extensive flint and artefact scatters recorded near to the Site and these indicate human activity from earlier prehistory to the medieval period. Portable Antiquities Scheme (PAS) held by the DCC HER records a high concentration of artefacts immediately south of the Site, coming from the area between Oaklands Farm and Donkhill Cottages. This includes Bronze Age to Roman material amongst the kind of post-medieval material more normally found in fields in the Midlands. The range of material appears to point to a focus of activity, perhaps a settlement, in this location during these periods. Away from this concentration, there are further PAS records of earlier prehistoric to early medieval date in the immediate Site environs.

7.40 Much of the settlement pattern in the study area appears to have established in the medieval period. Larger nucleated villages, such as Walton-on-Trent and Barton-under-Needwood, were located on the lower slopes of the Trent Valley, just above the floodplain, with smaller hamlets, such as Rosliston, Coton in the Elms and Caldwell,[29] established around smaller tributary streams to the east of the River Trent. Although subsequent development means that many of the buildings in these settlements are 18th century and later in date, each retain a church which is medieval in origin. A village is thought to have existed at Drakelow from the early medieval period but was apparently deserted by the 16th century and there are no above ground remains of this settlement. The likely site of the village lies outside of the Site.

7.41 During the medieval period, these settlements farmed the surrounding lands using an open field system. In this system, the fields were farmed communally with each household holding furlongs of land within common fields which were unenclosed (i.e. lacking in fixed boundaries like hedges) from those held by their neighbours. The Site formed part of the lands exploited by Walton-on-Trent, Rosliston and Drakelow. The open field system was characteristic of medieval agriculture across much of lowland England and traces of open field farming, in the

[29] Whilst the hamlet is called Caldwell, the parish it forms the centre of is called Cauldwell and some assets have been mistakenly given Cauldwell in their name or address in records.

form of the remains of ridge and furrow, are recorded widely across the Midlands. In some cases, ridge and furrow survives as a pronounced earthwork – giving the land surface an almost corrugated appearance – whilst in others it has been levelled by subsequent ploughing and has been detected from cropmarks visible on aerial photography. Ridge and furrow is recorded within the Site and in many fields in its immediate vicinity. Review of LiDAR and field visits indicates evidence of ridge and furrow within the Site north-east of Park Farm and in the centre of the Site (LUC 6-8 on **Figure 7.1**). In contrast well-preserved ridge and furrow earthworks can be found immediately west of the Site, in the fields between Ashtree Farm and Walton-on-Trent.

7.42 Further medieval features recorded in the study area also relate to land use. Both Walton and Drakelow had deer parks in the medieval period. These were high-status features, permission for which had to be sought from the crown, and they typically belonged to the lord of the manor. The northern end of the Site lies within the extent of Drakelow Park. Like many medieval deer parks, Drakelow Park was converted to a landscape park in the later post-medieval period. It was laid out around Drakelow Hall, an 18th century mansion and seat of a local noble family, the Gresleys. The Gresleys continued to occupy the Hall well into the 20th century, selling the estate in the 1930s. Few traces of the park now survive as it was subsequently redeveloped for energy generation in the mid-20th century.

7.43 The open field system was superseded in the post-medieval period as farming moved away from a collective effort, organised on a community basis, to farm holdings run by individual farmers. This entailed the conversion of former open fields into smaller fields with permanent boundaries concentrated into the hands of individual farmers. It also led to the establishment of farmsteads at distance from what had been the main settlement in the parish as some farmers sought to live in the midst of their holdings. Other farmers continued to live within the village/hamlet. Park Farm and Oaklands Farm are likely to have been established as part of the relocation of farm owners to live amongst their holdings. Land belonging to each farm lies within the Site whilst their farmhouses lie adjacent to the Site. The farmhouse at Park Farm is of 18th century origin and is a Grade II listed building,[30] whereas Oaklands Farm farmhouse appears to be of later 19th century data and is not designated. Both farms continue in use as the centre of operational farms and lie adjacent to farm buildings of various date, including several recent

[30] List Entry 1096453, listed under its former name 'Grove Farm'

large agricultural sheds. Historic mapping shows that field barns (LUC 3 and 4 in **Figure 7.1**) and a field barn and cottage (LUC 5 in **Figure 7.1**) existed east of Oaklands Farm and within the Site in the mid-19th century. These are likely to have been built when the land was enclosed into fields to provide further storage and accommodation within the farm holding but at distance from the farmstead. None of these structures are extant, having been demolished either between the 1840s and 1880s (LUC 3 in **Figure 7.1**) or 1990 and 2000 (LUC 4 and 5 in **Figure 7.1**).

7.44 Early enclosure into fields tended to happen either piecemeal or by agreement between local farmers. Fields created in this way often preserve the shape of open field furlongs within the alignment of the sinuous boundaries which define the fields – often referred to as 'reverse-S' field boundaries. The fields within the Site have some reverse-S boundaries[31] but the majority of the boundaries are rectilinear, evidencing more recent reorganisation of the land holdings. Map regression evidence indicates that this reorganisation was undertaken in the 20th century. Reverse-S fields boundaries are much more common between the Site and Walton-on-Trent, particularly west of Ashtree Farm, and appear to represent a remarkably good preservation of fieldscapes of this nature. The privatisation of land brought about by enclosure also meant that farmers could work other resources on their land. LiDAR data shows multiple shallow pits in several of the fields within the Site[32]. These are probably former marl pits but some of them are quite large so it is possible that they could also derive from small-scale quarrying. The pits are likely to be of later post-medieval date as they all appear to be mapped, in part, on the first edition Ordnance Survey.

7.45 The Trent Valley became a major industrial communications corridor in the later 18th century, first with the construction of the Trent and Mersey Canal in the 1770s and later with the coming of the railways in the 1840s – both were built along the valley floor. The canal connected the burgeoning industrial centres of the Midlands to raw materials and markets, both along the canal route itself and via the Mersey docks. It spurred industrial development and growth at many locations along its route, including at Burton-upon-Trent c. 3km north of the

[31] Fields O3, O6-O11 and O20-21.

[32] Fields O4-6, O13, O16, O19.

Site. The railway intensified this growth and these improved connections underpinned Burton's growth into a major brewing centre in the 19th century.

7.46 Away from Burton, the landscape remained largely rural into the 20th century. Over the course of the 20th century the floodplain was transformed by aggregate extraction. Much of the floodplain between Burton and Alrewas has been subject to aggregate quarrying. Whilst some active extraction sites remain, the majority are now worked out and flooded. Many of these have been put to other uses, including commemorative and leisure facilities, and some are now nature reserves. The growth of road transport as a key distribution mode in the latter half of the 20th century has also influenced the Site environs with the construction of distribution centres and industrial estates along the A38. This is particularly notable between the A38 at Barton-under-Needwood and the River Trent and also at the southern end of Burton. The River Trent was also central to the development of the National Grid generating system in the 1950s. Many coal-fired power stations were built along the River Trent from Staffordshire through to Nottinghamshire as the river provided a ready source of water for use in the stations' boiler and turbine systems, and cooling towers. The valley floor rail line, established in the 19th century, meant fuel could be brought in relatively easily from the neighbouring coalfields. Drakelow Park was chosen for the site of three co-located coal-fired generating stations in the 1950s with the first station opening in 1955. The stations were Drakelow A, B and C, collectively referred to as 'Drakelow Power Station'. Multiple overhead power lines (OHLs) were built to connect Drakelow Power Station into the grid and allow export of the electricity generated there. This means that there are multiple OHLs radiating out from Drakelow, carried on steel pylons, including two within the Site. Whilst the power stations have been decommissioned and removed, the Drakelow Power Station site remains in use for energy infrastructure and contains a large substation. Other sections of the former power station site are due to be redeveloped for a mix of uses including, an Energy from Waste (EfW) facility, employment land and housing.

Heritage Assets Within the Site

7.47 There are no designated heritage assets within the Site.

7.48 Although the immediate surroundings of the Site appear to indicate exploitation of the area from earlier prehistory to the present period, there are only a few DCC HER entries within the site itself. Recorded heritage assets within the Site comprise:

- An undated enclosure (MDR7113) – this is known from cropmarks and ascribed an *"unknown medieval date"* in the HER. No anomalies associated with the enclosure were detected by geophysical survey. Although ascribed a medieval date it is more likely, due to its shape and lack of alignment with known medieval field patterns, that it is of later prehistoric to Romano-British date and, if so, is likely to be of local importance (**Low value**) due to the way that archaeological deposits which constitute the asset would document how the area was used during these periods (evidential value).
- A possible Roman Road – the projected course of a road from Ibstock to Ryknild Street south of Burton-upon-Trent crosses the northern tip of the Site between Park Farm and Drakelow (MDR11325). Whilst geophysical survey found no clear trace of a Roman road, it is not possible to conclusively rule out any physical remains associated with the road within the Site. If it were extant within the Site, it is likely to be of at least local importance (**Low value**) as it would provide direct physical evidence (evidential value) of the local Roman road network.
- Drakelow Park – the northern end of the Site overlaps the former extent of this park (MDR2518). If present, archaeological remains of the pale[33] associated with the medieval deer park are likely to be of local importance (**Low value**) as they would provide direct physical evidence (evidential value) of a medieval land use thus far known only from documentary sources. Despite development and decommissioning of the Drakelow power stations, some elements of the later landscape parkland remain legible.[34] These provide some physical evidence of the post-medieval phase of Drakelow Park (evidential value) but have limited surviving heritage significance due to extensive modification of the parkland. As such, they are ascribed a **Very Low value**.
- Medieval ridge and furrow – earthworks of these cultivation remains are recorded east of Park Farm and in the centre of the Site (LUC 6-8 in **Figure 7.1**). They provide visible physical evidence (evidential and historical (illustrative) values) for medieval cultivation and also show how this was superseded by enclosure into private fields in the post-medieval period (historical (illustrative) value). Their setting, within the later fieldscapes which

[33] A specific form of boundary earthwork used to create the outer limit of a medieval deer park.

[34] Plantations at its periphery and a section of driveway and avenue.

supplanted them, contributes to this historical (illustrative) value. The assets have local importance (**Low value**) as they demonstrate a farming practice which was ubiquitous in the area in the medieval period.

- Post-medieval field boundaries – this asset was recorded as cropmarks near the centre of the Site (MDR7120) and provides physical evidence (evidential value) for post-medieval cultivation of the area and how this has been subsequently superseded. The asset has local importance but, as only a fraction of it survives and it is part of a well-understood and well-documented system, it has been ascribed a **Very Low value**.
- Post-medieval extraction/quarrying pits – LiDAR data shows multiple shallow pits within the Site.[35] These are likely to be post-medieval in date and relate to marl extraction and/or stone quarrying. They provide physical evidence (evidential value) for post-medieval cultivation and extraction of resources. They have local importance but, as they survive only as heavily ploughed out features, have been ascribed a **Very Low value**.

7.49 The Site has potential for further, hitherto unrecorded, below-ground heritage assets:

- Neolithic to Roman periods – the Site environs were used during these periods so contemporary assets are possible within the Site. If present they could range in importance from local to national importance (**Low** to **High value**) and would provide physical evidence (evidential value) of how the area was settled and used during these periods.
- Post-medieval field barns and other structures (LUC 3 to 5 in **Figure 7.1**). These no longer survive above ground but there is potential for some below-ground archaeological remains relating to them. If present they would provide some physical evidence (evidential value) for features characteristic of later 18th century and 19th century farming in the area. They would have local importance but, as only a fraction of the buildings' full extents would remain as archaeological deposits, they have been ascribed a **Very Low value**.

Off Site Assets

7.50 This section describes the assets within the study areas considered susceptible to effects related to setting change. Detail on other assets within the study areas not considered

[35] Fields P6, P8, P10, O4-6, O13, O16, O19

susceptible to effects related to setting change is contained in **Appendix 7.1: Historic Environment Assessment (HEA)**.

7.51 The following heritage assets have potential for effects related to setting change as a result of the Proposed Development:

- Park Farm – a farmhouse which is a Grade II listed building (List Entry No. 1096453).
- Entrance to the former Drakelow Park – gate piers and wing walls (Listed Building Grade II, List Entry No. 1158871) and adjacent non-designated lodge building.
- Walton-on-Trent Conservation Area and associated heritage assets.
- Borough Walls Iron Age hillfort – Scheduled Monument (1017742).
- Oaklands Farm – farmhouse and attached storage range plus Oaklands Farm Cottages, both non-designated.
- Church of St Mary, Rosliston – Grade II* listed building (List Entry No. 1159242).
- Church of St Mary, Coton in the Elms – Grade II listed building (List Entry No. 1096452).

Park Farm

7.52 Park Farm is a farmhouse of 18th century origin and is a Grade II listed building (List Entry No. 1096453). It is understood that it remains in use as the farmhouse for Park Farm. The farmhouse lies immediately west of the Drakelow cable connection section of the northern end of the Site. As discussed above it is likely to represent the core of a post-medieval farm holding created after enclosure of common fields. Land to the immediate north, east and south of the farmhouse forms gardens to the farmhouse with farm buildings of varying dates abutting its western side. The farm building complex has grown from a courtyard in the later 19th century to now covering an area roughly three times the size of the post-medieval farmstead. The complex contains 19th century farm buildings immediately next to the farmhouse with the other structures being recent, large agricultural sheds. Fields adjacent to the farmhouse are pasture and have been modified over the course of the 20th century. Two OHLs run into Drakelow through these fields, the closest lying c.100m east of the farmhouse. Two approaches run to the farm through the fields from Walton Road. These are of at least late 19th century date, are tree-lined and have some similarities in appearance to surviving avenues in the former Drakelow Park. These may indicate that Park Farm was part of the wider Drakelow estate in the later 19th century.

7.53 The heritage significance of Park Farm derives from its role as the centre of an enclosure period farmstead. As a Grade II listed building it is of national importance (**High value**). The core of this heritage significance stems from a combination of evidential and historical (illustrative) values. In evidential terms, the farmhouse physically documents how a domestic building at the core of a farmstead has evolved since the 18th century through to the present day. In historical (illustrative) terms, the farmhouse demonstrates the move by some farmers away from the settlement at the core of their parish following enclosure to living amongst their holdings. It also shows how the changing demands of farm life were accommodated over multiple generations of resident farmers and how it continues to be used for this purpose. If Park Farm was part of the Drakelow estate, it may also have illustrative (associative) value with the Gresley family. Although Park Farm is not experienced in a wholly unaltered post-medieval landscape, the setting of the farmhouse contributes to its heritage significance by allowing it to remain legible as the core of a rural landholding with its supporting ancillary buildings and related fields immediately adjacent.

Drakelow Park

7.54 Drakelow Park, a former landscape parkland and site of the decommissioned and dismantled Drakelow Power Station, lies north of Walton Road. The northern end of the Site lies within the former parkland. The structures which comprise the former entranceway into the park from Walton Road are a Grade II listed building (gate piers and wing walls, List Entry No. 1158871) and a non-designated lodge building lies immediately adjacent to these inside the former park. These assets form some of the few surviving buildings associated with the park and lie 90m west of the proposed Site access and 450m west of the proposed cable connection to Drakelow.[36] The entranceway was built c.1900 for Sir Robert Gresley, 11th Baronet Gresley, to designs of Sir Reginald Blomfield, a notable architect and garden designer. The designer of the lodge is currently unknown but it appears to have been built at the same time. The entranceway and lodge are flanked by plantations which formed the edge of the parkland in the 19th century. These act to screen the entranceway and lodge from view until almost upon the entrance. The drive which led into the parkland from this entrance survives to an extent, running for c.210m before terminating at the National Grid Drakelow substation boundary, with some

[36] others lie c.1.5km to the north at the fringe of Burton upon Trent and are Grade II listed buildings.

avenue trees flanking it. Three of the former Drakelow C cooling towers formerly stood c.200m north of the entranceway. Whilst these have been removed, the National Grid Drakelow substation remains operational and there are still a number of operational OHLs carried by pylons in close proximity to the entranceway, the closest OHL lies c.50m to its north.

7.55 As a Grade II listed building, the entranceway gates and walls are a heritage asset of national importance (**High value**). Its heritage significance stems from a combination of evidential, historical (illustrative and associative) and aesthetic values. In evidential and historical (illustrative) terms, the entranceway physically documents, and also shows, the weight the aristocracy and their designers placed on having sufficiently grand entrances to their parklands and the need to restrict access to only permitted visitors. The key aspect of the asset's heritage significance comes from its historical (associative) value and how this influences its appearance (aesthetic value). The entranceway has the hallmarks of the work of Blomfield, a nationally significant architect with major work in London and commemorative monuments at Ypres, including the influenced by French baroque. The association with the last of the Gresleys to hold Drakelow also adds to the heritage significance of the asset. The lodge is non-designated and not known to be associated with a notable architect[37] and, as such, the lodge has been given a preliminary assessment of local importance (**Low value**). It has the same evidential and historical (illustrative) value as the entranceway as it too is part of the experience of arrival at the park and the control of entry. It also has historical (associative) value owing to its likely construction for Sir Robert Gresley, 11th Baronet Gresley. The setting of these assets contributes to their significance by preserving, despite development associated with the Drakelow Power Stations, the sense that it is the entrance to an aristocratic parkland – something that remains despite the presence of OHLs in the immediate vicinity of the assets. The retention of the perimeter plantations adjacent to the entranceway also preserve some of the 'theatre' involved in the arrival at the park – whereby the entrance is concealed from visitors until the last moment.

[37] It is assumed that it was appraised when the other structures in Drakelow park were appraised for listing in the 1980s and it was not noted as having special architectural or historic interest.

Assets at Walton-on-Trent

7.56 The village of Walton-on-Trent lies c.410m from the western edge of the Site and contains numerous heritage assets. These consist of the Walton-on-Trent Conservation Area plus eight listed buildings and the non-designated parkland of Walton Hall lie within it. The listed buildings include the Church of St Laurence and Walton Hall, both grade II*. The conservation area comprises the historic core of the village and parkland and fields associated with Walton Hall. The eastern part of the village is excluded from the conservation area and consists of recent housing. A further c. 30 non-designated buildings which are historic and contribute to the character and appearance of the conservation area[38].

7.57 Walton-on-Trent is a historic crossing point on the River Trent and the present village is of at least medieval origins. Its historic core consists of buildings of varying dates and associated plots and the majority of listed buildings lie along Main Street. The church is the only known surviving medieval building and the rest of the village is made up of buildings of 17th to 20th century date. The earlier buildings, whilst now heavily altered, are largely farmhouses in origin whereas those of 19th century and later date are less closely tied to farming and reflect a trend for wealthier inhabitants of Burton-upon-Trent to move out of the town to the nearby countryside.

7.58 As designated heritage assets, the listed buildings and the conservation area at Walton-on-Trent are heritage assets of national importance (**High value**). A full assessment of the significance of these assets is presented in **Appendix 7.1** 'Asset significance: Off Site Assets' section therefore only the points relevant to this ES assessment are presented here.

7.59 With the exception of the church and Walton Hall, the heritage significance of these assets relates primarily to their evidential and historical (illustrative) values with aesthetic value also factoring to an extent. The historic buildings and plot patterns provide direct physical evidence of the presence of an agricultural village over several centuries and the way this has changed over time. They also allow an understanding, and appreciation, of how the village is structured and its evolution. That the historic core can be seen to relate to the river and adjacent rural landscape also allows understanding of their interrelated nature. This quality is best appreciated at the north, south and west edges of the conservation area, as the historic built

[38] Mel Morris Conservation (2014) Walton on Trent Character Statement.

form gives way directly to fields. Aesthetic value derives from the way in which buildings and plot patterns combine to form a coherent and historic-feeling place despite the presence of buildings of a wide variety of dates and forms. The built form of the village itself and the surrounding landscape, particularly trees along banks of the River Trent, largely act to prevent appreciation of buildings from beyond the village, mean that the setting of assets within the conservation area is relatively discrete and underscores their origin as components of a historic village. The setting of the conservation area – between the river crossing and a fieldscape of significant time-depth, both of which historically supported the village – contributes to its significance by allowing an appreciation of these key aspects in the village's development. These qualities are not as appreciable from eastern approaches to the conservation area as recent housing lies between it and fields.

7.60 The Church of St Laurence lies at the western edge of the village. As a Grade II* listed building (List Entry No. 1159347) it is of national importance (**High value**). It is of largely medieval date, restored in the 1860s, and has a tower but no spire. Its heritage significance is a combination of evidential, historical (illustrative and associative), aesthetic and communal values. Evidential value derives from the fabric of the building and the way it provides direct physical evidence for the evolution of the church since at least the 12th century. The fabric also evidences changing fashions in church architecture and the trend for extensive Victorian work under the banner of 'restoration'. In historical illustrative terms, the architectural quality of both the medieval and later elements show the importance of the church to the community and that it warranted expenditure on costly buildings and the use of skilled masons and architects. In historical associative terms, the church has connections to local noble families who patronised the church (Gresleys and Ferrers) and the Victorian and later work is associated with key players in the Gothic Revival (G.E. Street, Swaine Bourne). The aesthetic value of the church derives from the architectural sophistication, detailing, the quality of execution and the way in which multiple styles and phases sit harmoniously against one another. Communal value comes from the church's role as the focus of community life from at least the 12th century. Owing to the level of vegetation, both around the church itself and around the river, and the relatively squat nature of the church tower, the church is not widely visible away from its immediate environs. The main exception to this is the northern approach to the village along Main Street, where the church is clearly visible at the edge of the village adjacent to the river from the stretch between

Warren Farm and the village edge. The church's setting contributes to its heritage significance by underscoring its central role in the historic village and allowing appreciation of this.

7.61 Walton Hall is a small country house set in a small parkland which lies at the southern edge of the village. The parkland forms the southern section of the Conservation Area. The parkland is laid out on the valley side and shoulder of the Trent-Mease watershed with the Hall on high ground in the centre of the north of the park. The Hall was built in the 1720s for the Sheriff of Derbyshire, William Taylor, and replaced an earlier manor house. The Hall and its associated stables and garden walls are a Grade II* listed building (List Entry No. 1159300), a further hall outbuilding is a Grade II listed building (List Entry No. 1096427) and the parkland is not designated. The parkland appears 18th century and later in date and comprises formal gardens (immediately adjacent to the Hall), tree-studded lawns and, at the south of the park, arable fields edged by plantation woodland. The Hall lies c.1 km northwest of the Site, with the edge of the parkland, which also forms the conservation area boundary, c. 410 m northwest of the Site. The hall and associated listed buildings, as designated heritage assets, are **High value**. The parkland appears to contain no particularly notable features which would warrant designation and is similar to the parks surrounding minor gentry houses of this period in the Trent Valley so is assessed as being of local importance (**Low value**).

7.62 The heritage significance of Walton Hall and its associated buildings is a combination of evidential, historical, and aesthetic values. In evidential and historical (illustrative) terms, the buildings document and show the nature of domestic and ancillary buildings built for, and used by, the upper echelons of society in the 18th century. They also show the way these have been altered and used over subsequent centuries as the Hall has changed in ownership. They also have historical (associative) value due to their construction for an important local family (Taylors). In aesthetic terms, the use of a restrained, classically-influenced, design executed in brick of a higher quality than in contemporary buildings in the village mean that the hall is distinctive. The establishment of a park around the Hall adds to this aesthetic value by placing it in a controlled and attractive private preserve – this aspect of the setting of the hall contributes strongly to its heritage significance. The park layout means that the Hall is only clearly visible from within the park itself and in glimpses on the approaches to the village from the south. The placement of the hall on a high point means that it looms above these approaches, underscoring the status of the hall as the residence of the controller of the manor. This aspect of

its setting contributes to its significance by making an eloquent declaration of the power of the hall and its occupants.

7.63 The heritage significance of the parkland derives from similar sources to that of the Hall. In evidential and historical (illustrative) terms, the park documents and shows the upper echelons of society modifying their environments to provide fit, and private, surroundings for their country homes in the 18th century. The park has some historical (associative) value due to its probable construction for the Taylors. In aesthetic terms, the parkland was designed to provide varied and attractive surroundings for the house in line with then current fashions. The setting of the parkland allows understanding of its intended function – a private preserve of the hall separate to the village and surrounding agricultural land – by allowing appreciation of the sharp change in character from the fields and village to the parkland landscape.

Borough Walls Iron Age hillfort Scheduled Monument

7.64 The Borough Walls Iron Age hillfort Scheduled Monument (List Entry No. 1017742) lies c.1km west of the Site and immediately south of Walton Hall park. It lies at the end of a shoulder of land which forms part of the Trent-Mease watershed, known as Borough Hill, and ground level drops sharply away to the floor of the Trent Valley immediately west of the asset. The slope down from the asset to valley floor is wooded. The hillfort is defined by a single circuit of bank and ditch ramparts. The interior is in use as grazing land and the northwestern and southeastern banks of the hillfort are covered in trees. Land which would have been enclosed within the hillfort but is now occupied by farm buildings at Borough Hill is excluded from the scheduled area.

7.65 As a scheduled monument, the asset is of national importance (**High value**). Its heritage significance is formed by a combination of evidential and historical (illustrative) values. In evidential terms, the archaeological deposits which constitute the hillfort will provide a physical document of how assets of this kind were built in the Iron Age and how they were used, fell into disuse and became appropriated for other uses. In historical (illustrative) terms, the presence of the hillfort allows understanding of how the area was used in later prehistory. The setting of the asset factors into its heritage significance by allowing appreciation of considerations likely to have been key in why it was built there, namely the availability of commanding views out over the Trent valley. The contribution this makes is somewhat compromised by the low level of visibility the asset has – it is difficult to recognise as a hillfort when moving through the adjacent

landscape due to the level of tree cover on its ramparts and the presence of more recent farm buildings.

Assets at Oaklands Farm

7.66 Oaklands Farm lies c.170m southwest of the Site. A farmhouse and attached storage range at Oaklands Farm is shown on historic mapping from at least the early 19th century, surviving buildings at the farm appear to be of roughly this date. Oaklands Farm Cottages lie on the opposite side of Coton Road to Oaklands Farm and are first shown on the first edition Ordnance Survey. They appear to be a range of agricultural workers' cottages of late 19th century date. Although much extended, a two-storey brick farmhouse and attached storage range is still visible at Oaklands. The courtyard of farm buildings which previously stood to the north of the farmhouse has been replaced with large, modern agricultural sheds and barns and a range of bungalows constructed next to these by Coton Road. Land south of the farmhouse is in use as gardens and contains serval mature trees. A separate detached house, Twin Oaks House, was built immediately east of the farmhouse in the 1960s. The level of development and mature vegetation around Oaklands Farm means that the farmhouse is not generally visible from the surrounding landscape. The chief exception to this is on the approach to the farm from the south along Coton Road where both the farmhouse and Oaklands Cottages Farm are clearly visible. Despite the extent of later development, the related nature of Oaklands Farm and Oaklands Farm Cottages remains legible from Coton Road, particularly immediately adjacent to Oaklands Farm.

7.67 Oaklands Farm and Oaklands Farm Cottages are non-designated heritage assets and ascribed a local level of importance (**Low value**). Like Park Farm, Oaklands Farm is an enclosure period farmstead and its heritage significance stems from a similar combination of evidential and historical (illustrative) values. In evidential terms, the farmhouse physically documents how a domestic building at the core of a farmstead has evolved since the 19th century through retention of both original fabric and that associated with subsequent extension and alteration. In historical (illustrative) terms, the farmhouse demonstrates the move away from the settlement at the core of the parish following enclosure to living in the centre of newly created farm holdings. It also shows how the changing demands of farm life were accommodated through enlarging and modifying the farmhouse over multiple generations of resident farmers and how it continues to be used for this purpose. Oaklands Farm Cottages'

heritage significance stems from evidential and historical (illustrative) values. The addition of these cottages in the late 19th century documents and shows that novel forms of rural housing were adopted to service farms lying at distance from the main settlement. Although Oaklands Farm and its cottages are not experienced in a rural landscape unaltered since they were first built and used, their setting contributes to their heritage significance to an extent by allowing them to remain legible as the core of a rural landholding and related to one another. As discussed above, this is a quality that is best appreciated at relatively close range when approaching the assets from the south along Coton lane.

Church of St Mary, Rosliston

7.68 The Church of St Mary, Rosliston, is a Grade II* listed building (List Entry No. 1159242) and lies within the village of Rosliston c.420m east of the Site within a rectangular churchyard. It is medieval in origin but the chief surviving element of this date is the 14th century tower and spire – the nave and chance were rebuilt in a plain gothic style in 1819. This rebuild was in part financed by a grant from the Society for the Enlargement and Building of Churches and Chapels. Rosliston is a village of at least medieval origin and is linear, being laid out along Main Street. Historically the village was fairly strung out along Main Street with numerous undeveloped gaps between the buildings within the village. Recent infill development means these gaps are no longer present and the village is perceived as a largely modern settlement. This is particularly evident around the church where only the buildings immediately south of the church around Main Street are pre-20th century. Recent housing abuts the churchyard on its east and west sides and a public open space, formed of fields converted to recreational use, lies north of the churchyard. The church and churchyard are approached up a short alleyway from Main Street which runs between historic buildings. The degree of development adjacent to the church means that it is largely screened from view when in the village unless in the immediate vicinity of the church. As such, it feels tucked away and secluded. Owing to the presence of a spire, the church is also visible from many locations in the surrounding countryside.

7.69 As a Grade II* listed building, the Church of St Mary, Rosliston, is of national importance (**High value**). Its heritage significance is a combination of evidential, historical, aesthetic and communal values. The evidential value of the church derives from the fabric of the building and the way in which this provides direct physical evidence for the evolution of the church since at

least the 14th century. It also provides evidence for the trend for churches to be extensively rebuilt in the early 19th century.

7.70 The historical value of the church comes from both illustrative and associative elements. In illustrative terms, the architectural quality of both the medieval and 19th century elements show the importance of the church to the community. This shows that it warranted expenditure on costly stone buildings and the involvement of skilled masons. In associative terms, the church has connections to the Society for the Enlargement and Building of Churches, a society established after the Napoleonic War to ensure there were sufficient places of worship for the growing population - its work continues today under the auspices of the National Churches Trust.

7.71 Aesthetic value derives from the architectural sophistication and detailing used in the phases of the building, the quality of execution and the way in which these sit harmoniously against one another. Communal value comes from the church's role as the focus of community life from at least the 14th century. The setting of the church contributes to its significance to an extent. The historic buildings immediately adjacent allow the church to be understood as part of a village which is historic in origin. The level and extent of recent development means that, when in close proximity to the church, the sense of it as a rural church is not particularly perceptible. This quality is much more strongly felt at distance from the church as the spire acts to show not only where the church is but also the village to which it belongs. At this range the distinction between recent and historic buildings is not perceptible so the church is seen as being part of a rural village surrounded by fields and woods of varying dates.

Church of St Mary, Coton in the Elms

7.72 The Church of St Mary, Coton in the Elms, is a Grade II listed building (List Entry No. 1096452) lying c.1km southeast of the Site and toward the northern end of the village. It was built in the 1840s as a wholesale replacement of the previous parish church, on an entirely new site, to designs of H.I. Stevens of Derby. It is in a restrained gothic style and has a tower and spire. As with Rosliston, Coton is a linear village of medieval origin which historically contained numerous gaps between buildings but has also seen infill development since the 20th century remove these. Whilst much of the village is perceived as a modern settlement, there are some surviving historic buildings in the immediate vicinity of the church. Recent housing abuts the churchyard on its east and north sides but, as this is relatively low-rise in nature and the

churchyard fronts directly onto Church Street, the church is readily visible within this section of the village. It is also possible to see out from the churchyard to the fields north of the village. The presence of a spire means the church is also visible from many locations in the surrounding countryside.

7.73 As a Grade II listed building, the Church of St Mary, Coton in the Elms, is of national importance (**High value**). Its heritage significance is a combination of evidential, historical, aesthetic and communal values. The evidential value of the church derives from the fabric of the building and the way this provides direct physical evidence for the religious practices of the Church of England in the 19th century. It also provides evidence for the trend for rural churches to be wholly rebuilt in the 19th century. Historical value church comes from both illustrative and associative elements. In illustrative terms, its architectural quality shows the importance of the church to the community such that it warranted rebuilding under supervision of an architect. In associative terms, the church has connections to H.I. Stevens, a major regional architect who was responsible for many church buildings and civic works. Like St Mary's Rosliston, this church is also connected to the Society for the Enlargement and Building of Churches which contributed part of the funds for its construction. The aesthetic value of the church derives from the architectural sophistication and detailing used in the building and the quality of execution. Communal value comes from the church's role as the focus of community life from at the mid-19th century. The setting of the church contributes to its significance to an extent. The historic buildings immediately adjacent allow the church to be understood as part of a village which is historic in origin. The setting of the church also allows it to be appreciated as a rural church. Whilst this quality is appreciable to an extent from the churchyard, it is more strongly felt at distance from the church as the spire acts to show not only where the church is but also the village to which it belongs. Like St Mary's Rosliston, at this range the distinction between recent and historic buildings is not perceptible and the church is seen as being part of a rural village surrounded by fields and woods of varying dates.

Future Baseline in the Absence of the Proposed Development

7.74 Should the Proposed Development not be pursued, the archaeological remains within the Site are likely to remain largely unaltered as the current land use is likely to remain unchanged. This will have a neutral effect upon these assets.

7.75 Some change in the setting of heritage assets lying close to the north of the Site, such as Park Farm and the Drakelow Park entranceway, is likely to occur in the absence of the Proposed Development. This change would be as a result of the proposed redevelopment of the northern section of the Drakelow Power Station site for employment and energy infrastructure (i.e. Application Ref. CW9/0420/7). This change would arise as this scheme lies within the former Drakelow Park to which these assets are or are likely to have been functionally related to.

Implications of Climate Change

7.76 The summary of the relevant climate change projections using the UK Climate Change Projections 2018 (UKCP18) are:

- Temperatures are projected to increase, particularly in summer.
- Winter rainfall is projected to increase and summer rainfall is most likely to decrease.
- Heavy rain days (rainfall greater than 25mm) are projected to increase, particularly in winter.
- Near surface wind speeds are expected to increase in the second half of the 21st century with winter months experiencing more significant effects of winds; however, the increase in wind speeds is projected to be modest.
- An increase in frequency of winter storms over the UK.

7.77 The effects of climate change can directly affect below-ground heritage assets through changes to groundwater regimes (which alter the ground conditions in which buried archaeological remains exist) and through erosion or submerging of sites.

7.78 The Site is not thought to contain any special preservation conditions, such as waterlogging or anoxic conditions, which will be altered by changes in groundwater regime.

Design Considerations and Embedded Mitigation

7.79 No specific design considerations based on heritage assets have been proposed as the findings of baseline surveys have not indicated any heritage assets with sensitivities that need to be addressed by design changes.

7.80 Good practice measures to avoid or address effects to heritage assets have been incorporated, where appropriate, within the CEMP. These measures will be designed once consultation on the results of evaluation (i.e. geophysical survey) has been completed with the DCC Archaeological Officer, as archaeological advisor to SDDC. Without prejudice to the CEMP content, it is likely that measures relating to archaeological monitoring of zones of groundworks (e.g. for substation and BESS) and control measures to avoid accidental damage to heritage assets (e.g. arising from vehicle movements in the vicinity of the Park Farm listed building) are likely to be included. Any archaeological works to be undertaken will be covered by a Written Scheme of Investigation (WSI) detailing the scope of works and how they are to be executed and monitored. The WSI will be agreed with the appropriate body and, at the time of writing, this is assumed to be the DCC Archaeologist in their capacity as archaeological advisor to SDDC.

Assessment of Construction Effects

7.81 The assessment of effects is based on the project description as outlined in **Chapter 4: Project Description**. Unless otherwise stated, potential effects identified are considered to be negative.

Predicted Construction Effects

Direct physical effects

7.82 The Proposed Development will entail groundworks (which includes cable trenching, piling of panels and works to construct the Battery Energy Storage System (BESS) and the Proposed Development's substation) and such processes will remove and/or truncate any below-ground heritage assets which exist within their footprint. Such effects will be direct, permanent and irreversible.

7.83 In terms of the assets identified above, this will have the following potential effects:

- An undated enclosure of possible later prehistoric to Romano-British date (MDR7113) - the exact extent of this non-designated enclosure is unclear, but the panel array does not extend right into the corner of the field in which it lies so it is likely that it would be truncated to an extent rather than wholly removed. This is likely to represent **less than substantial**

harm to a **Low value** asset and **would not be significant** in the context of the EIA Regulations.

- A non-designated possible Roman Road north of Park Farm (MDR11325) – it is currently unclear whether any archaeological deposits associated with the road exist within the Site. Proposed works in this section of the Site comprise the underground connection from the northern panel array to Drakelow substation. The course of this connection is not yet finalised but if it is to run through the Roman road then this will cause very localised truncation to the asset. This would represent a low level of **less than substantial harm** to a **Low value** asset and **would not be significant** in the context of the EIA Regulations**.**
- Drakelow Park:
  - Assets associated with the non-designated deer park pale (MDR2518) may survive adjacent to Walton Road as shallow earthworks and buried archaeological remains. Proposed works in this part of the Site comprise the underground connection from the northern panel array and a new entrance for construction traffic. If present, both proposed works are likely to cross the park pale. This would cause very localised truncation to what is a landscape-scale asset (i.e. only affects two small points on its perimeter). This would represent a low level of **less than substantial harm** to a **Low value** asset and **would not be significant** in the context of the EIA Regulations.
  - peripheral plantations and a section of driveway and avenue associated with the post-medieval landscape parkland. Proposed works in this part of the Site comprise the underground connection from the northern panel array to the National Grid Drakelow substation. This connection is to be undergrounded into the Proposed Development's substation so would not result in harm to these surviving parkland elements. Therefore the asset's cultural significance would be unaffected resulting in a neutral effect and **not significant** in the context of the EIA Regulations.
- Medieval ridge and furrow (LUC 6-8 in **Figure 7.1**) – of the several areas of ridge and furrow only LUC 6 lies in area where extensive groundworks are likely as it coincides with the site of the substation and battery storage area. The others lie in fields on the cable connection with only LUC 8 directly interacting with the cable route. Groundworks for the substation and battery storage are likely to cause some truncation to LUC 6's earthworks and below-ground deposits associated with the ridge and furrow. A total of 230 m of cable

route runs through LUC 8. Installation of a cable may also cause some localised disturbance to the earthworks. These effects would represent a low level of **less than substantial harm** to a **Low value** asset and **would not be significant** in the context of the EIA Regulations.

- Post-medieval field boundaries (MDR7120) – the asset lies at the northern tip of the southern panel array and it is likely that the asset would be truncated rather than wholly removed by installation groundworks. This could **range from substantial harm to less than substantial harm** to a **Very Low value** asset and **would not be significant** in the context of the EIA Regulations.
- Post-medieval extraction/quarrying pits – these lie within the panel arrays and it is likely that they would be truncated rather than wholly removed by installation groundworks. Owing to the size of the assets and the scale of the groundworks, this is likely to constitute **less than substantial harm** to a **Very Low value** asset and **would not be significant** in the context of the EIA Regulations.

7.84 The site has some potential to contain hitherto unrecorded below-ground heritage assets of later prehistoric to Roman date. If present these could range in importance from local to national importance (**Low** to **High value**). If such assets lie within the panel arrays or footprints of structures (i.e. the Proposed Development's substation, energy storage) they could experience physical change ranging from some truncation (less than substantial harm) to removal (total loss):

- Assets of lower value (i.e. **Medium value and lower**) would be subject to **substantial harm or total loss** which would **not be significant** in the context of the EIA Regulations.
- Assets of **High value** subject to **substantial harm or total loss** brings **potential for a significant adverse effect in the context of the EIA Regulations**.

7.85 The risk of there being such high value assets on the Site is considered very low due to analysis of the geophysical survey results which suggests extensive disturbance of the Site in the past, and discussions with the DCC Archaeologist.

7.86 The Site has some potential to contain hitherto unrecorded below-ground heritage assets related to post-medieval buildings including field barns (LUC 3-5 in **Figure 7.1**). The barn sites lie within the panel arrays and could experience physical change ranging from truncation to

removal. This would **range from less than substantial harm to total loss** and, as it would affect a **Very Low value** asset, **would not be significant** in the context of the EIA Regulations.

Other effects

7.87 The presence of construction activities, including plant, within the Site may be visible from, or in combination with, the Grade II listed buildings at Park Farm[39] and the Drakelow Park entranceway[40] immediately west of the Site. As discussed above, the setting of these assets makes some contribution to their heritage significance. Construction activity in this section of the Site will be limited to the installation of the Proposed Development's substation connection cable. This is due to being undergrounded and it is assumed that construction infrastructure will only be required for the period over which the cable is sunk and connected and also that it will be deployed in a constrained working area. The change in the setting of these assets will, therefore, be temporary and short term – the construction period for the Proposed Development as a whole is up to 2 years – so is considered unlikely to alter the significance or perception of these assets so **no harm would arise and there would be no effect**.

7.88 Construction activities will be undertaken within the Site to the north and east of the Oaklands Farm area. Owing to the presence of large modern agricultural shed between the non-designated farm buildings and cottages at Oaklands Farm and the Site boundary it is unlikely that construction activity will be visible in combination with the assets. As such, the presence of construction is unlikely to alter the significance or perception of these assets so **no harm would arise and there would be no effect**.

Proposed Mitigation

7.89 A suitable programme of mitigation to address harm to, or loss of, assets would be drawn up in consultation with the DCC Archaeological Officer, as archaeological advisor to SDDC. This is likely to comprise a staged programme of archaeological works secured by Requirement of the DCO and will be detailed in a WSI agreed via consultation with the DCC Archaeological Officer. This mitigation will not reduce the level of effects to the heritage assets but will provide a

[39] List Entry Nos. 1096453

[40] List Entry Nos. 1158871

record of the features lost as a result of development, preserving them by record. This follows industry best-practice to address effects to heritage assets.

Residual Construction Effects

7.90 Following application of the above mitigation and with the adoption of design measures to reduce or avoid effects to heritage assets so that total loss of assets does not arise, the following effects are anticipated during the construction period:

- An undated enclosure – less than substantial harm to a **Low value** asset, **not significant** in the context of the EIA Regulations.
- A possible Roman Road – a low level of less than substantial harm to a **Low value** asset, **not significant** in the context of the EIA Regulations.
- Drakelow Park medieval deer park pale – a low level of less than substantial harm to a **Low value, not significant** in the context of the EIA Regulations.
- Drakelow Park post-medieval landscape parkland components – no change to a **Very Low value** asset**, not significant** in the context of the EIA Regulations.
- Earthworks related to medieval cultivation – a low level of less than substantial harm to a **Low value** asset, **not significant** in the context of the EIA Regulations.
- Post-medieval field boundaries – substantial harm to less than substantial harm to a **Very Low value** asset, **not significant** in the context of the EIA Regulations.
- Post-medieval extraction/quarrying pits – less than substantial harm to a **Very Low value** asset, **not significant** in the context of the EIA Regulations.
- Potential (unknown) below-ground heritage assets of later prehistoric to Roman date:
  - Assets of lower value (i.e. Medium and below) subject to substantial harm or total loss, **not significant** in the context of the EIA Regulations.
  - Assets of High value subject to substantial harm, **potential for a significant adverse effect in the context of the EIA Regulations**. The risk of there being such high value assets on the Site is considered very low due to analysis of the geophysical survey results which suggests extensive disturbance of the Site in the past, and discussions with the DCC Archaeologist.

- Potential below-ground heritage assets related to post-medieval field barns – less than substantial harm to total loss to a **Very Low value** asset, **not significant** in the context of the EIA Regulations.

Assessment of Operational Effects

7.91 The assessment of effects is based on the project description as outlined in **Chapter 4: Project Description**. Unless otherwise stated, potential effects identified are considered to be negative.

Predicted Operational Effects

7.92 The following heritage assets have potential for effects related to setting change as a result of the Proposed Development:

- Park Farm – a farmhouse which is a Grade II listed building (List Entry No. 1096453).
- Entrance to the former Drakelow Park – gate piers and wing walls (Listed Building Grade II, List Entry No. 1158871) and adjacent non-designated lodge building.
- Heritage assets at Walton-on-Trent.
- Borough Walls Iron Age hillfort – Scheduled Monument (List Entry No. 1017742).
- Oaklands Farm – a non-designated farmhouse, with attached storage range, and the non-designated Oaklands Farm Cottages.
- Church of St Mary, Rosliston – Grade II* listed building (List Entry No. 1159242).
- Church of St Mary, Coton in the Elms – Grade II listed building (List Entry No. 1096452).

7.93 Assessment of effects related to setting change is based upon the level of visibility of the Proposed Development and review of other effects which could change how assets are experienced (e.g. changes to the traffic and/or noise baseline). All effects would be reversible with the removal of the panel array and other above-ground infrastructure associated with the Proposed Development.

Park Farm

7.94 Park Farm is a farmhouse which is a Grade II listed building and lies immediately west of the northern end of the Site. Its heritage significance derives from its role as the centre of an enclosure period farmstead. As a Grade II listed building it is an asset of **High value**. The core of this heritage significance stems from a combination of evidential and historical (illustrative) values. Although Park Farm is not experienced in a wholly unaltered post-medieval landscape, its setting contributes to its heritage significance by allowing it to remain legible as the core of a rural landholding with its supporting ancillary buildings and related fields immediately adjacent.

7.95 Following revision to the Proposed Development after the PEIR stage, the northern tip of the panel array will lie 1.5 km south of the farmhouse. The screened ZTV indicates that no panels will be visible from Park Farm or from the approach drives to it from Walton Road. The Proposed Development's substation will not be visible. The connection cable to the National Grid Drakelow substation will also run east of the farmhouse but, as it will be undergrounded, will not be experienced in the setting of Park Farm. As such, there will be no change to the setting of Park Farm and **no harm or effect would arise**.

Entrance to the former Drakelow Park

7.96 The structures which comprise the former entranceway into the park from Walton Road are Grade II listed buildings (**High value**). A non-designated lodge building lies within the former parkland immediately adjacent to the entranceway (**Low value**). Both date to c. 1900. Their heritage significance stems from a combination of evidential, historical (illustrative and associative) and aesthetic values. The setting of these assets contributes to their significance by preserving, despite development associated with Drakelow Power Station, the sense that it is the entrance to an aristocratic parkland and some of the 'theatre' involved in the arrival at the park.

7.97 Following revision to the Proposed Development after the PEIR stage, the northern tip of the panel array will lie c.1.8 km south of the park entranceway. The screened ZTV indicates that no panels will be visible from the assets nor from the approach to them along to Walton Road. The Proposed Development's substation will not be visible. As such, there will be no change to the setting of the entrance to the former Drakelow Park and **no harm or effect would arise**.

Assets at Walton-on-Trent

7.98 Heritage assets at Walton-on-Trent consist of the Walton-on-Trent Conservation Area plus eight listed buildings and the non-designated parkland of Walton Hall. As designated heritage assets, the listed buildings and the conservation area at Walton-on-Trent are heritage assets of **High value**.

7.99 With the exception of Walton Hall, the listed buildings at Walton-on-Trent are not considered susceptible to effects as a result of the operational Proposed Development. There is no predicted visibility of the Proposed Development within the historic core of the village, either in the bare ground or screened ZTVs, so any effects would arise as a result of how the assets would be viewed in combination with the Proposed Development. The listed buildings other than the church have relatively discrete settings as the built form of the village acts to prevent appreciation of them from outside of the village. There is no visibility of the Proposed Development predicted from these settings so assets will not be experienced in combination with it and, therefore, their settings would not change. As such, the heritage significance of these assets will remain unaffected the ability to appreciate these assets would be unaltered and **no harm or effect would arise**. The Church of St Laurence has a more extensive setting, being experienced from within the village and the approach from the north. There is also no visibility predicted from these locations so the church would not be experienced in combination with the Proposed Development and, therefore, its setting would not change. Its heritage significance will remain unaffected and the ability to appreciate the asset would be unaltered, as such **no harm or effect would arise**.

7.100 Although the conservation area lies only c.420m from the western tip of the Site, there is very limited predicted visibility of the Proposed Development. Only a section of the southern part of the conservation area, coincident with the central southern section of the Walton Hall parkland and a stretch of the park's eastern boundary lies within the screened panels ZTV. None of the parkland lies within the screened substation and battery storage ZTV. Given this level of likely visibility, the conservation area would remain experienced as set within a rural landscape and its central focus, the church, would still be seen in this context. The legibility of the relationship of both the conservation area and the church to the river crossing would be unaffected and still appreciable from Main Street near Warren Farm. As the experience of the

conservation area would not meaningfully change once the Proposed Development is operational, it is predicted that **no harm or effect would arise**.

7.101 Walton Hall, a small 18th century country house, and its associated stables and garden walls are a Grade II* listed building (List Entry No. 1159300) and a further hall outbuilding is a Grade II listed building (List Entry No. 1096427). These assets are of **High value**. The hall is set within a non-designated parkland which is a **Low value** asset. The heritage significance of the Hall and its associated buildings and parkland are a combination of evidential, historical (illustrative and associative), and aesthetic values. The presence of a park around the Hall is an aspect of the Hall's setting that contributes strongly to its heritage significance. The park not only places the Hall in aesthetically pleasing surroundings but also acts to conceal and reveal it in a manner similar to that which its original designers intended, including making the hall loom above the southern approaches to the village by placement of the Hall on a high point. These aspects of the Hall's setting contribute to its significance by making an eloquent declaration of the power of the Hall and its occupants.

7.102 The setting of the parkland allows understanding of its intended function – a private preserve of the Hall separate to the village and surrounding agricultural land – underscored by the sharp change in character from both the fields and the village to the parkland landscape. The level of visibility of the Proposed Development in the context of the Hall and park is discussed above. The legibility of the private nature of the Hall's parkland and the way the hall building is positioned to both be secluded and oversee the southern approaches to the village would remain unaltered once the Proposed Development is operational. It is possible that there may be some visibility of panels from the southern section of the Hall's parkland. Any visibility of the Proposed Development from this section of the parkland would be highly screened by trees within and at the edges of the parkland. The Proposed Development, if visible, would be experienced in views to the south-east and appear within the surrounding, largely rural, landscape. There are no obvious designed views from this section of the parkland toward the south-east direction (i.e. toward the Proposed Development). Any views towards the Site from this section of the parkland, would not include views towards the Hall, which lies in the opposite direction (behind the viewer). This means there would be no experience of the hall and the other listed buildings in combination with the Proposed Development.

7.103 The potential visibility of the Proposed Development from the south of the parkland would not alter the aspects of its setting (i.e. a notably private area distinct from the surrounding rural landscape) which contribute to its significance. As such, the Proposed Development is predicted to result in no changes in the setting of the Hall or related assets which would harm their significance, as such and **no harm or effect would arise**.

Borough Walls Iron Age hillfort Scheduled Monument.

7.104 The Borough Walls Iron Age hillfort (List Entry No. 1017742) c.1km west of the Site and immediately south of Walton Hall's parkland. As a scheduled monument, the asset is of national importance (**High value**). Its heritage significance is formed by a combination of evidential and historical (illustrative) values. The setting of the scheduled monument factors into its heritage significance by allowing appreciation of considerations likely have been key in why it was built there (i.e. the availability of commanding views out over the Trent valley). The contribution this makes is somewhat compromised by the low level of visibility the asset currently has due to woodland and buildings at its edges.

7.105 The western edge of the southern panel array will lie c.1.1km southeast of the hillfort. The central section of the hillfort lies within the screened panels ZTV. There is no visibility within the screened substation and battery storage ZTV. Whilst the Proposed Development would alter the character of part of the landscape over which the hillfort looks, this is a landscape already very different in character from that in which it would have operated when in use. The intervening c.2000 years have seen much alteration in land cover and communications networks so the hillfort's 'original' setting does not survive. The distance and separation of the Proposed Development from the hillfort mean that it will not challenge any remaining prominence the asset has. The Proposed Development will also not affect the views out from the asset over the Trent Valley which are likely to have been important in siting the asset. As such, the elements of the setting of the hillfort which contribute to its significance will remain unaltered by the Proposed Development and **no harm or effect would arise**.

Oaklands Farm

7.106 Oaklands Farm lies c.140m southwest of the Site and contains non-designated heritage assets – Oaklands Farm farmhouse, including attached storage range, and Oaklands Farm Cottages – which are 19th century in origin and are of **Low value**. The heritage significance of

these assets derives from Oaklands Farm's role as the centre of an enclosure period farmstead and the core significance stems from a combination of evidential and historical (illustrative) values. Although Oaklands Farm and its cottages are not experienced in a rural landscape which has remained unaltered since they were first built and used, their setting contributes to their heritage significance to an extent. It does this by allowing them to remain legible as the core of a rural landholding and related to one another – a quality best appreciated at close range when approaching the assets from the south along Coton Lane.

7.107 The Proposed Development will alter the setting of Oaklands Farm as the Proposed Development will wrap around the north side of the farm complex and lie c. 200m to its east and southwest edges. This will mean the farmstead is experienced largely in the context of a solar farm, rather than fields, including views out from the farmhouse to the southeast (i.e. from what appears to be its main frontage). This will erode, to an extent, how the farmhouse can be understood in its historic rural context and cause some harm. Oaklands Farm Cottages will experience a similar, but slightly less extensive, change in their setting causing a similar erosion of how this asset can be understood and a similar level of harm. For both assets, the presence of the Proposed Development would leave the ability to perceive their functional relationship unaffected. The role of setting in the significance of these assets has already been eroded to an extent by development to their north and southeast. The fundamental aspects of their heritage significance, derived from the form and appearance of the buildings, and how these document and show Oaklands Farm's role since the early 19th century, will remain unaltered. As such, the change in setting is considered to result in **less than substantial harm** to these **Low value** assets – this is considered **not significant** in the context of the EIA Regulations.

Church of St Mary, Rosliston

7.108 As a Grade II* listed building, the Church of St Mary, Rosliston, is a **High value** asset. Its heritage significance is a combination of evidential, historical, aesthetic and communal values. The setting of the church contributes to its significance to an extent. Historic buildings immediately adjacent to the church allow it to be understood as part of a village which is historic in origin. The extent of recent development means that the church is mainly understood as a rural church at distance where its spire acts to show where the church is and the village to which it belongs.

7.109 The church is c.430m east of the Site and it lies within the screened panel ZTV, while no visibility is shown in the screened substation and battery storage ZTV. Owing to the height of buildings immediately adjacent to the church, there would be no visibility of the Proposed Development from the churchyard. It is possible that the church may be viewed in combination with the Proposed Development when approaching it from public rights of way, which run through fields north and south of the village, but such views are likely to be heavily filtered by hedgerows and other boundary vegetation. When the church is approached from these directions, the presence of the Proposed Development may erode the sense of it as a rural church to a very small extent. Experience of the church would remain unaltered from all other directions, including from the footpath which runs between Walton-on-Trent and Rosliston (see LVIA viewpoint VP03). The prominence of the church would remain unchallenged by the Proposed Development and the fundamental aspects of the church's heritage significance, derived from the form and appearance of the building and its history of alteration and maintenance, will remain unaltered. As such, the change in setting is considered to result in a **low level of less than substantial harm** to a **High value** asset – this is considered **not significant** in the context of the EIA Regulations.

Church of St Mary, Coton in the Elms

7.110 As a Grade II listed building, the Church of St Mary, Coton in the Elms, is a **High value** asset. Its heritage significance is a combination of evidential, historical, aesthetic and communal values and its setting of the church contributes to its significance to an extent. The historic buildings immediately adjacent allow the church to be understood as part of a village which is historic in origin. The extent of recent development means that the church is mainly understood as a rural church at distance where the spire acts to show where the church is and the village to which it belongs. At this range the distinction between recent and historic buildings is not perceptible so the church is seen as being part of a rural village.

7.111 The church is c.1km southeast of the Site and it lies within the screened panels ZTV, while no visibility is shown in the screened substation and battery storage ZTV. Owing to the low height of buildings immediately adjacent to the church, it is possible that there would be visibility of the array from the churchyard. It is also possible that the church may be viewed in combination with the Proposed Development when approaching it from footpaths running through fields northwest and west of the village but such views are likely to be heavily filtered by

hedgerows and other boundary vegetation. The Proposed Development would also be at a distance of c.1km from the asset so it would be seen as a separate element with fields and woods lying between the village edge and the Site. This distance and separation mean any erosion to the sense of St Mary's as a rural church would be extremely limited. The prominence of the church would remain unchallenged by the Proposed Development. The fundamental aspects of the church's heritage significance, derived from the form and appearance of the building, will remain unaltered. As such, the change in setting is considered to result in a **very low level of less than substantial harm** to a **High value** asset – this is considered **not significant** in the context of the EIA Regulations.

Proposed Mitigation

7.112 No heritage-asset specific mitigation[41] is proposed to address effects arising as a result of setting change since no significant effects were identified by the assessment.

Residual Operational Effects

7.113 The following effects are anticipated during the operational period:

- Oaklands Farm farmhouse and storage range – **less than substantial harm** to a **Low value** asset, **not significant** in the context of the EIA Regulations.
- Oaklands Farm Cottages – **less than substantial harm** to a **Low value** asset, **not significant** in the context of the EIA Regulations.
- Church of St Mary, Rosliston, Grade II* listed building – **less than substantial harm** to a **High value** asset, **not significant** in the context of the EIA Regulations.
- Church of St Mary, Coton in the Elms, Grade II listed building – **very low level of less than substantial harm** to a **High value** asset, **not significant** in the context of the EIA Regulations.

[41] i.e. beyond what landscape and boundary measures are already proposed as mitigation.

Cumulative Effects

Predicted Cumulative Effects during Construction

7.114 The effects which arise during the construction period are confined to direct physical effects to heritage assets. The potential for a cumulative effect with a scheme also affecting the former Drakelow Park (HER ref. MDR2518) was identified at PEIR (DMPA/2020/1460). This scheme is now being built out so it will have already affected the former Drakelow Park and forms part of the baseline conditions considered for the ES assessment. As such, there is now no potential for the Proposed Development to have a cumulative effect on the former Drakelow Park.

7.115 As no construction-period effects are predicted related to setting change as a result of the Proposed Development there is no potential for cumulative effects of this kind.

Proposed Mitigation

7.116 No cumulative effects have been identified which require mitigation.

Residual Cumulative Effects during Construction

7.117 No cumulative effects have been identified during construction.

Predicted Cumulative Effects during Operation

7.118 Operational period effects relate to change in the setting of assets. The cumulative schemes presented in **Chapter 2: The Environmental Impact Assessment,** were reviewed and none was identified which caused an effect to the assets which would experience effects due to the Proposed Development. This assessment is summarised in **Appendix 7.1**.

Proposed Mitigation

7.119 No cumulative effects have been identified during operation, so no mitigation is proposed.

Residual Cumulative Effects during Operation

7.120 No cumulative effects have been identified during operation.

Combined Effects

7.121 No combined effects have been identified.

Further Survey Requirements and Monitoring

7.122 The Site has been subject to geophysical survey, following statutory consultation stage, to refine understanding of the presence and extent of hitherto unrecorded below-ground heritage assets (reporting supplied as **Appendix 7.2**). The results of the survey will be used to develop a mitigation strategy which will be agreed with the archaeological advisor to SDDC and form the mitigation outlined in the WSI. The WSI will ensure any works required are carried out to an appropriate scope and standard and in a timely manner.

Summary of Effects

7.123 **Table 7.4** summarises the predicted effects of the Proposed Development on the historic environment and its component heritage assets.

Table 7.4: Summary of Effects

Nature of Predicted Effect	Level of Effect	Mitigation	Level of Residual Effect
Construction			
Direct physical effect to an undated enclosure	Less than substantial harm – not significant in the context of the EIA Regulations	Mitigation strategy including archaeological fieldwork	Less than substantial harm – not significant in the context of the EIA Regulations
Direct physical effect to a section of a Roman road	Less than substantial harm – not significant in the	Mitigation strategy including archaeological fieldwork	Less than substantial harm – not significant in the context of the EIA Regulations

Nature of Predicted Effect	Level of Effect	Mitigation	Level of Residual Effect
	context of the EIA Regulations		
Direct physical effect to a section of medieval park pale at Drakelow Park	Less than substantial harm – not significant in the context of the EIA Regulations	Mitigation strategy including archaeological fieldwork	Less than substantial harm – not significant in the context of the EIA Regulations
Direct physical effect to medieval ridge and furrow	Less than substantial harm – not significant in the context of the EIA Regulations	Mitigation strategy including archaeological fieldwork	Less than substantial harm – not significant in the context of the EIA Regulations
Direct physical effect to post-medieval field boundaries	Less than substantial harm to substantial harm – not significant in the context of the EIA Regulations	Mitigation strategy including archaeological fieldwork	Less than substantial harm to substantial harm – not significant in the context of the EIA Regulations
Direct physical effect to extraction/ quarrying pits	Less than substantial harm – not significant in the context of the EIA Regulations	Mitigation strategy including archaeological fieldwork	Less than substantial harm – not significant in the context of the EIA Regulations
Potential direct physical effects to heritage assets of	Less than substantial harm (for assets of medium value and lower) to Total loss	Mitigation strategy including archaeological fieldwork. This	Less than substantial harm to Substantial harm – **potential for significant effects**

Nature of Predicted Effect	Level of Effect	Mitigation	Level of Residual Effect
later prehistoric to Roman date	(for assets of high value) – potential for effect significant in the context of the EIA Regulations for assets of high value if present.	mitigation will not reduce the level of effects to the heritage assets but will provide a record of the features lost as a result of development, preserving them by record. This follows industry best-practice to address effects to heritage assets.	for assets of high value if present.
Potential direct physical effects to post-medieval field barns	Less than substantial harm to total loss – not significant in the context of the EIA Regulations	Mitigation strategy including archaeological fieldwork	Less than substantial harm to total loss – not significant in the context of the EIA Regulations
Operation			
Change in the setting of the non-designated Oaklands Farm farmhouse and storage range which affects the significance of the asset	Less than substantial harm – not significant in the context of the EIA Regulations	None	Less than substantial harm – not significant in the context of the EIA Regulations

Nature of Predicted Effect	Level of Effect	Mitigation	Level of Residual Effect
Change in the setting of Oaklands Farm Cottages which affects the significance of the asset	Less than substantial harm – not significant in the context of the EIA Regulations	None	Less than substantial harm – not significant in the context of the EIA Regulations
Church of St Mary, Rosliston, Grade II* listed building which affects the significance of the asset	Less than substantial harm – not significant in the context of the EIA Regulations	None	Less than substantial harm – not significant in the context of the EIA Regulations
Church of St Mary, Coton in the Elms, Grade II listed building which affects the significance of the asset	Less than substantial harm – not significant in the context of the EIA Regulations	None	Less than substantial harm – not significant in the context of the EIA Regulations
Cumulative Construction			
None			
Cumulative Operation			
None			
Combined Construction			
None			

Nature of Predicted Effect	Level of Effect	Mitigation	Level of Residual Effect
Combined Operation			
None			