



WHITESTONE
solar farm

WHITESTONE SOLAR FARM

Volume 6: Environmental Statement

6.20 Appendix 8.7: Archaeological Investigation and Preservation Strategy

Application Document ref. EN0110020/APP/6.20

Revision 01

June 2026

Planning Act (2008)
Infrastructure Planning (Applications: Prescribed
Forms and Procedure)
Regulations 2009
Regulations 5(2)(a)

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ENVIRONMENTAL STATEMENT

Document status					
Version	Purpose of Document	Authored by	Reviewed by	Approved by	Review date
Rev01	Rev01	ERM	TLT, DWD, Pershing, Whitestone Net Zero Ltd	Whitestone Net Zero Ltd	01/06/2026

Approval for issue		
Whitestone Net Zero Ltd		1 June 2026

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Prepared by:

ERM

Prepared for:

Whitestone Net Zero Ltd

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Glossary

Term	Meaning
<i>Cable Corridors</i>	Corridors within which the high voltage cables would be constructed.
<i>Conservation Area</i>	Conservation Areas can be created where a local planning authority identifies an area of special architectural or historic interest, which deserves careful management to protect that character. An area has to be identified by the local authority as having a definite architectural quality or historic interest to merit designation. Conservation Areas are defined by local authorities within local plans and given extra protection through planning controls and considerations.
<i>Environmental Statement (ES)</i>	The Environmental Statement which presents the environmental information relating to the Proposed Development. The ES has been prepared to present information for formal consultation in accordance with current EIA regulation.
<i>Designated Asset</i>	A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation.
<i>Heritage Asset</i>	A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. It includes designated heritage assets and assets identified by the local planning authority (including local listing).
<i>Heritage Significance</i>	The value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting. For World Heritage Sites, the cultural value described within each site's Statement of Outstanding Universal Value forms part of its significance.
<i>Historic Environment Records</i>	Historic Environment Records (HERs) are information services maintained and managed by local authorities. They contain details on local archaeological sites and finds, historic buildings and historic landscapes and are regularly updated. This information is usually held in a database with a digital mapping system (Geographic Information System).
<i>Listed Building</i>	Designated asset. Buildings of special architectural and historic interest protected under relevant legislation.

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Term	Meaning
<i>Order Limits</i>	Total area comprising the Site and Cable Corridor
<i>Registered Park and Garden</i>	The Register of Parks and Gardens of Special Historic Interest in England (RPG) place on emphasis on designed landscapes. A registered park or garden is not protected by a separate consent regime. However, where planning permission is sought for development affecting a registered park or garden, the Local Planning Authority will consider the impact of the proposals on the Site's special character and give great weight to its conservation.
<i>Scheduled Monument</i>	Designated asset. These sites can include standing stones, burial mounds, the remains of monastic buildings and more. They can be above or below ground and can consist of remains as well as structures that are still in use. Although archaeology and important historic sites are all around us, monuments are added to the Schedule if the Secretary of State considers that they are of national importance and that the protection which comes with scheduling would assist the monument's conservation. Scheduled Monuments are protected under relevant legislation.
<i>Setting</i>	The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
<i>The Applicant</i>	Whitestone Net Zero Ltd
<i>The Proposed Development</i>	The proposed Whitestone Solar Farm.
<i>The Site</i>	The land planned to be used for solar PV array and associated infrastructure, BESS substation, and landscaping and habitat enhancement. The Site is split into W1, W2, and W3.

Acronyms

Acronym	Meaning
<i>AIPS</i>	Archaeological Investigation and Preservation Strategy
<i>APS</i>	Archaeological Preservation Strategy
<i>BESS</i>	Battery Energy Storage System
<i>BNG</i>	Biodiversity Net Gain
<i>DCO</i>	Development Consent Order
<i>EM</i>	Electromagnetic
<i>ERM</i>	Environmental Resources Management
<i>ES</i>	Environmental Statement
<i>HAS</i>	Heightened Archaeological Sensitivity
<i>HER</i>	Historic Environment Records
<i>LPA</i>	Local Planning Authority

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Acronym	Meaning
<i>oWSI</i>	Outline Written Scheme of Investigation
<i>SYAS</i>	South Yorkshire Archaeology Service
<i>W1</i>	Whitestone 1
<i>W2</i>	Whitestone 2
<i>W3</i>	Whitestone 3

Units

Units	Meaning
<i>ha</i>	Hectares
<i>m</i>	Metres

8.7 Archaeological Investigation and Preservation Strategy

Introduction

- 8.7.1 This Appendix has been prepared by Environmental Resources Management (ERM) on behalf of Whitestone Net Zero Ltd (the Applicant). It comprises an Archaeological Investigation and Preservation Strategy (AIPS) for the Proposed Whitestone Solar Farm (the Proposed Development).
- 8.7.2 This Appendix has been prepared for submission alongside the **ES Volume 2, Chapter 8: Cultural Heritage and Archaeology [EN0110020/APP/6.8]** and sets out the overarching approach to archaeological investigation and preservation that will be adopted after the Development Consent Order (DCO) submission.
- 8.7.3 This Appendix should be read alongside the **Outline Written Scheme of Investigation (oWSI) [EN0110020/APP/5.16]** which secures the commitments made in this AIPS including an outline method for how the investigation and mitigation work detailed within this strategy will be carried out.

Purpose

- 8.7.4 This Appendix provides an overview of the Phase I investigation work and sets out the strategy for the next stages of archaeological investigation, known as Phase II, in relation to the Proposed Development.
- 8.7.5 It also provides the decision-making framework for the subsequent phases of mitigation that may follow on from the Phase II works. This includes the circumstances under which further archaeological investigations would be undertaken at the pre-construction and construction phase, to offset predicted loss of buried archaeology or, conversely, under what circumstances steps will be taken to ensure preservation of significant archaeological remains in situ.
- 8.7.6 An outline Archaeological Preservation Strategy (see Annex A) is also provided for implementation of non-intrusive solar array infrastructure within areas of Heightened Archaeological Sensitivity (HAS), as identified through the already completed Phase I investigations. Provision is also made for the definition of new HAS areas and modification of existing ones following the results of the ongoing Phase I and upcoming Phase II works.

Policy and Guidance

- 8.7.7 Policy and guidance relevant to archaeological assessment and mitigation can be found within legislation can be found in **ES Volume 3, Appendix 8.1: Legislation, Policy and Guidance [EN0110020/APP/6.20]**.

Existing Baseline Conditions

- 8.7.8 **ES Volume 3, Appendix 8.2: Heritage Baseline [EN0110020/APP/6.20]** sets out the baseline, which is based upon desk-based assessment of secondary data sources, as well as primary survey in the form of walkover survey, setting assessment site visits and geophysical (magnetometer) survey of the Site.

Zoning and Principles of the Strategy

Overview

- 8.7.9 In line with new guidance for solar development (ALGAO et al. 2026¹), this AIPS sets out a proportionate and flexible approach that responds to the results of an iterative sequence of investigation.
- 8.7.10 As shown in Plate 1, the Phase I assessment began with a non-intrusive phase of investigation and review of design parameters for the Proposed Development, aimed at zoning the Site and Cable Corridors based on their archaeological sensitivity and potential impact.
- 8.7.11 The sensitivity and impact zones are set out in the following two sections. This is followed by an outline strategy for each impact zone relative to their archaeological sensitivity zoning.

Sensitivity Zones

- 8.7.12 Currently 13 HAS areas have been identified through non-intrusive investigation that have the potential to be impacted by the Proposed Development. These are detailed within **Table 8.7.1** and shown in **Statutory and Non-Statutory Historic or Scheduled Monument Sites [EN01100020/APP/2.7]**, noting also that completion of the Phase I and II surveys may further refine the extent of the HAS (see designated Strategy Review periods as detailed below and shown on Plate 1).

Plate 1. Flow of Phased Investigations from Pre-Application to Construction

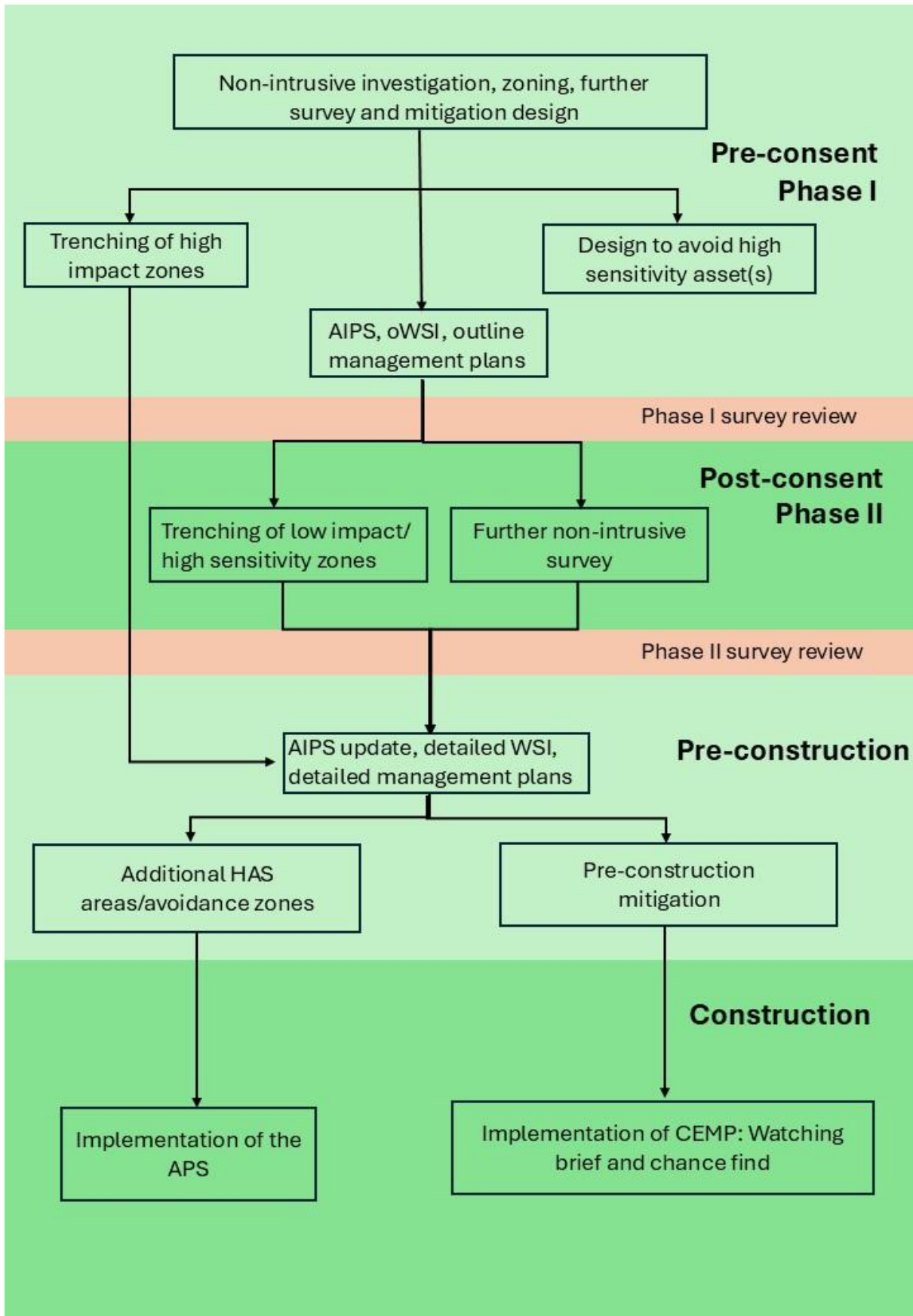


Table 8.7.1 Areas of Heightened Archaeological Sensitivity (HAS)

Location within Site/Land Parcel	HAS	Description	Data Source	Area (ha)	Infrastructure
W1/34	HAS2	Likely Iron Age or Romano-British settlement enclosure	Historic Environment Records (HER) data/ Geophysics anomaly HER 02005/01	1.6ha	Solar PV Array
W1/162	HAS3	C19th brickworks	HER data/historic mapping HER 02349/01	1.6ha	Substation
W2/58	HAS4	A series of likely Iron Age or Romano-British settlement and agricultural enclosures	HER data/Geophysics anomaly HER 02349/01	Entirety of land parcel	Solar PV Array
W2/59	HAS4	A series of likely Iron Age or Romano-British settlement and agricultural enclosures	Geophysics anomaly	Entirety of land parcel	Solar PV Array
W2/85	HAS5	A series of likely Iron Age or Romano-British settlement and agricultural enclosures	Geophysics anomaly	1ha	Substation / BESS
W2/90	HAS14	A series of likely Iron Age or Romano-British settlement enclosures	Geophysics anomaly	1ha	Solar PV Array
W2/112	HAS6	Likely Iron Age or Romano-British settlement enclosure	Geophysics anomaly	0.8ha	Solar PV Array
W2/112	HAS7	WWII defences	HER data/Cropmark data HER 04712	1ha	Solar PV Array

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Location within Site/Land Parcel	HAS	Description	Data Source	Area (ha)	Infrastructure
W2/128	HAS8	A series of likely Iron Age or Romano-British settlement enclosures	Geophysics anomaly	2.3ha	Solar PV Array
W2/141	HAS9	Enclosure of probable late prehistoric or Romano-British date, Todwick	HER data/ Geophysics anomaly HER 06163	3.5ha	Solar PV Array
W2/141	HAS10	A series of likely Iron Age or Romano-British settlement enclosures	Geophysics anomaly	1ha	Solar PV Array
W2/113	HAS15	Potential Iron Age or Romano-British settlement enclosures	Geophysics anomaly	7.5ha	Solar PV Array
W3/177	HAS11	Likely Iron Age or Romano-British enclosure	HER data and geophysics anomalies	4ha	Solar PV Array
CRL/n/a	HAS12	Probable Bronze Age barrow cemetery, Manor Road, Harthill	HER HER 05833	1ha	Cable Corridor

Impact Zones

- 8.7.13 Construction impacts associated with the Battery Energy Storage System (BESS) Substations/ Satellite substations, and to a less extent the Power Conversion Stations, would be of sufficient magnitude to truncate and likely remove all sub-surface remains within their footprint. These are considered **high impact zones**.
- 8.7.14 Construction impacts associated with the installation of the solar PV array – insertion of piling – would be of a lesser magnitude. When considered against the surface area of the Site as a whole, the piling footprint would represent a fraction of a percent of the Site’s surface area, and the probability of the piles having a material impact on the archaeological interest of any subsurface archaeological remains is very low. There remains some potential for certain piles to pass through smaller discrete features, e.g. post holes, and/or to affect the interface between archaeological features. Again, however, taking into account the very low proportion of the Site that would be physically affected by the piling, the probability of any material loss of archaeological interest/heritage significance is very low overall. These are considered **low impact zones**.

- 8.7.15 Construction impacts associated with installation of the cabling along the Cable Corridors, would truncate and likely remove all sub surface remains within the footprint of cable trenches and within areas of stripping of overburden for the construction corridor. Cable Corridors will however be sited to avoid buried archaeology and are therefore considered **low impact zones**. If further surveys identify an area of heightened sensitivity across a large portion, or across the entire width, of the construction corridor(s), these portions of the Cable Corridors would be considered **high impact zones**.
- 8.7.16 The investigation and preservation strategy for each of these impact zones where they intersect with different zones of archaeological sensitivity is provided in Table 2.
- 8.7.17 Where possible early-stage design changes were implemented to reduce the potential impact upon those HAS areas identified to date. Design changes involving amendments to the Order Limits to avoid HAS areas are described in Section 8.6 of **ES Volume 2, Chapter 8: Cultural Heritage and Archaeology [EN011020/APP/6.8]**.

Phase I Surveys

- 8.7.18 Phase I surveys, those completed before Application submission or prior to the start of or during examination are:
- Geophysical survey of Whitestone 1 (W1), Whitestone 2 (W2) and Whitestone 3 (W3), results of which are provided in **ES Volume 3, Appendix 8.6: Geophysical Survey [EN0110020/APP/6.20]**;
 - Trial trenching of high impact zones within the Site comprising the substation and BESS components of the Proposed Development. Results of trial trenching completed to date are presented in **ES Volume 3, Appendix 8.9: Phase I Trial Trenching Report [EN0110020/APP/6.20]**; and
 - Geophysical survey of the Cable Corridor, results of which are provided in **ES Volume 3, Appendix 8.8: Cable Corridor Geophysical Survey [EN0110020/APP/6.20]**.
- 8.7.19 Due to land access restrictions, some land parcels along the Cable Corridor were not able to be completed at the time of writing. In addition, some Phase I trench locations were not able to be completed at the time of writing, due to land access and weather/ground conditions. Completion of these Phase I investigations is ongoing and outputs will be provided prior to or during examination to ensure interested parties are able to comment on the information.

Strategy Review Following Phase I Survey

- 8.7.20 It is anticipated that the ongoing Phase I surveys will be completed in the autumn of 2026. The results of the Phase I surveys will be reviewed by the Applicant and discussed with SYAS. During this review period, the zoning of the Site and the scope of the surveys as presented in this strategy, and within the WSI, will be updated as required.

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Table 8.7.2 Investigation and Preservation Strategy

Zone Category	Infrastructure	Survey Approach and Status	Mitigation Strategy
High Sensitivity/ High Impact	Permanent hardstanding, buildings (e.g. substations, BESS), parts of the Cable Corridor	<ul style="list-style-type: none"> • Magnetometry survey of Substations/BESS – complete; • Magnetometry survey of Cable Corridor – underway; and • Phase I trenching targeting archaeology of possible regional or national importance - underway. 	<ul style="list-style-type: none"> • <i>Design</i> - Avoid siting infrastructure in sensitive areas where possible; and • <i>Pre-construction</i> - If avoidance not feasible, controlled archaeological excavation to offset harm will be implemented in accordance with oWSI [EN011020/APP/5.16].
Low Sensitivity / High Impact	Permanent hardstanding, buildings (e.g. substations, BESS), parts of the Cable Corridor	<ul style="list-style-type: none"> • Magnetometry survey of Substations/BESS – complete. • Magnetometry survey of Cable Corridor – underway; • Phase I trenching targeting archaeology of possible local importance – underway; and • Phase I trenching of blank areas to test magnetometry results – underway. 	<ul style="list-style-type: none"> • <i>Pre-construction/construction</i> - Archaeologically supervised soil stripping (strip map and sample) or watching brief during construction phase to be implemented in accordance with oWSI [EN0110020/APP/5.16]; and • <i>Pre-construction/construction</i> - If unexpected significant archaeology identified, further controlled mitigation excavations may be implemented in accordance with oWSI [EN0110020/APP/5.26].
High Sensitivity / Low Impact	Solar PV areas, majority of the Cable Corridor	<ul style="list-style-type: none"> • Magnetometry survey of solar PV areas – complete; • Magnetometry survey of Cable Corridor – underway; and • Phase II trenching targeting archaeology of possible local to national significance within 	<ul style="list-style-type: none"> • <i>Design</i> - Avoid through panel micro-siting where possible; and • <i>Construction</i> - If avoidance not feasible in areas confirmed as high sensitivity by the Phase II trenching, non-intrusive installation methods will be

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Zone Category	Infrastructure	Survey Approach and Status	Mitigation Strategy
		<p>proposed Solar arrays and Cable Corridor - post-consent.</p>	<p>implemented in accordance with APS.</p>
<p>Low Sensitivity / Low Impact</p>	<p>Solar PV areas, majority of the Cable Corridor</p>	<ul style="list-style-type: none"> • Magnetometry survey of solar PV areas – complete; • Magnetometry survey of Cable Corridor – underway; and • No further survey works proposed. 	<ul style="list-style-type: none"> • <i>Construction</i> - Archaeological monitoring during installation where appropriate in accordance with oWSI [EN0110020/APP/5.16]; and • <i>Construction</i> - If unexpected significant archaeology identified, controlled mitigation excavations may be implemented in accordance with oWSI [EN011002/APP/5.16].
<p>Unknown Sensitivity/ Low Impact</p>	<p>Solar PV areas</p>	<ul style="list-style-type: none"> • Phase II non-intrusive surveys where magnetometry confidence low – post-consent; and • Followed by, if required, Phase II trenching targeting archaeology of possible local to national significance within proposed Solar arrays and Cable Corridor - post-consent. 	<ul style="list-style-type: none"> • Mitigation steps will be in accordance with the sensitivity status determined by the results of Phase II surveys.

Phase II Surveys

8.7.21 The Phase II archaeological investigations consist of:

- Non-intrusive surveys in selected portions of the low impact zone where additional information would be beneficial (the solar PV array and Cable Corridors); and
- Targeted trial trench evaluation across the low impact zone (solar PV array and Cable Corridors), aimed at defining the extent and character of known assets.

Non-Intrusive Surveys

8.7.22 Additional targeted geophysical survey is required in areas of uncertain archaeological sensitivity. The preliminary scope and areas where this may be undertaken are outlined below.

Targeted Electromagnetic (EM) Survey

8.7.23 In areas of the Proposed Development with currently unknown archaeological sensitivity where magnetometry identified areas of such high background magnetism (possible green waste) that archaeological features are unlikely to have been detected, targeted electromagnetic survey will be undertaken. To ensure that this technique is effective at identifying archaeology, it is proposed to undertake a trial on two small areas.

8.7.24 The proposed trial areas would be:

- A known enclosure within W1 that is not within an area of high background magnetism; and
- An enclosure in land parcel 34 of W1, where high background magnetism is present; this enclosure is recorded in the HER (ref. 04365/01) but was not identified by the magnetometry survey.

8.7.25 If the trial proves effective on the area of high background magnetism, the survey may be extended to include the remainder of the fields containing high background magnetism in W1.

8.7.26 The primary aim of the survey would be to assess the archaeological potential of the areas of high background magnetism.

8.7.27 The procedure for implementing the additional non-intrusive survey is set out within the **oWSI [EN0110020/APP/5.16]** and will be further developed in the forthcoming detailed WSI as a requirement of Schedule 2 of the **Draft DCO [EN0110020/APP/3.1]**.

Trial Trench Evaluation

8.7.28 Trial trench evaluation is required within the high sensitivity/low impact zones (solar PV arrays and the Cable Corridor) to assess for the presence, condition, age and significance of buried archaeology and to determine the approach to mitigation. Discussion is ongoing with South Yorkshire Archaeology Service (SYAS) to confirm a trench plan for this portion of the Proposed Development in accordance with the **oWSI [EN011020/APP/5.16]**.

- 8.7.29 As noted above, the Phase I geophysical survey of the Cable Corridor is ongoing. Following discussion of the geophysical results with SYAS, a trench plan for this portion of the Proposed Development will be produced in accordance with the **oWSI [EN0110020/APP/5.16]**.
- 8.7.30 The primary aims will be to:
- Test the veracity of the geophysical survey results across the Proposed Development;
 - Aid in the characterisation and extent of the known archaeology on the Site as well as to inform the potential for additional, currently unrecorded assets;
 - Aid in differentiating between areas of known archaeological potential, i.e. settlement, industry, roads/trackways and areas of agricultural enclosures and remains of field systems; and
 - Inform the need for and scope of any post-consent archaeological works.
- 8.7.31 The proposed Phase II Solar Array Trench Plan will be designed to be proportionate to the nature of the scheme, the level of ground disturbance and the nature of the heritage resource within the Site. Consistent with the principles advocated in the new guidance (ALGAO et al. 2026²), trenches will not be positioned to sample:
- Areas that would not be developed, e.g., biodiversity net gain (BNG), green space, preservation areas etc; and
 - Areas that are ‘blank’ and located away from possible settlements, i.e., where no geophysical anomalies or other aspects of the archaeological baseline dataset are present.
- 8.7.32 Trenches will, however, be positioned to sample ‘blank’ areas surrounding, within and between possible settlement sites comprising:
- The areas around possible settlement sites to confirm extent;
 - Possible internal portions of enclosures; and
 - Possible inter-settlement areas.
- 8.7.33 The procedure for implementing the Phase II trial trench evaluation is set out within the **oWSI [EN0110020/APP/5.16]** and will be further developed in the forthcoming detailed WSI as a requirement of Schedule 2 of the Draft DCO. The trench plans for the solar PV areas and the Cable Corridor will be confirmed within the detailed WSI and an archaeological contractor appointed to carry out the work.

Strategy Review Following Phase II Survey

- 8.7.34 The Phase II surveys will be completed in adequate time to allow for the results to be reviewed and discussed with SYAS and for an appropriate approach to mitigation to be agreed and implemented during a clearly defined pre-construction phase, prior to construction commencing.
- 8.7.35 During this review period, the zoning of the Proposed Development, scope of investigations and mitigation measures, as presented in this strategy, and within the **oWSI [EN0110020/APP/5.16]**, will be updated as required.

Mitigation Overview

- 8.7.36 Decision-making regarding the appropriate mitigation procedure will be guided by the zoning as set out in Table 2 and following the reviews of Phase I and Phase II investigations as summarised below:
- If the results of the Phase I and II investigations confirm a high impact/high sensitivity area, pre-construction mitigation will be implemented in accordance with the **oWSI [EN0110020/APP/5.16]**;
 - If the results of the Phase I and/or II investigations confirm a low impact/high sensitivity area, the APS (see Annex A) will be implemented; and
 - If the results of the Phase I and Phase II investigations confirm high impact/low sensitivity area, construction phase mitigation will be implemented in accordance with the **oWSI [EN011020/APP/5.16]**.

Pre-construction Mitigation

- 8.7.37 Consultation with SYAS will follow the Phase II trial trench evaluation to determine the nature of any pre-construction mitigation required. Where preservation by design consistent with the APS is not possible, it is likely that the mitigation of significant buried archaeology would either take the form of controlled archaeological excavation or a strip map and sample exercise.
- 8.7.38 Controlled archaeological excavation is where a specified mitigation area that corresponds to the area of impact within which known buried archaeological features are located, is set aside for archaeological investigation.
- 8.7.39 Strip map and sample excavation would be undertaken across a less well defined or larger area when archaeology is known to be present. Often this technique would be employed when it is thought unlikely that significant archaeology is present.

Archaeological Preservation Strategy (APS)

- 8.7.40 The APS is a strategy by which archaeological remains of a level of significance warranting preservation in situ would be protected during installation, operation, and decommissioning. Specifically, it covers:
- Any areas currently proposed to be preserved in situ, either via exclusion or the use of non-intrusive infrastructure, e.g., concrete/ballast footings, suspended cabling etc;
 - A strategy for preserving in situ any currently unknown remains that might be identified during pre- and post-consent fieldwork, either via exclusion or the use of non-intrusive infrastructure;
 - The specifications of the infrastructure to be used; and
 - The sensitive methodology by which that infrastructure would be installed and removed to ensure potential impacts upon archaeological remains resulting from plant machinery tracking and ground preparation works during installation and decommissioning are avoided.
- 8.7.41 The APS will be maintained, and the measures it contains adhered to, by the Site administrator (the Client), or their successor(s) in title, through to point of

decommission. The APS will be a 'live' document and will require updates throughout the archaeological evaluation and subsequent project lifecycles.

8.7.42 An outline APS is provided in Annex A.

Construction Phase Mitigation

Archaeological Watching Brief

8.7.43 Due to the known sensitivity of the Proposed Development, there will likely be some areas where potential exists for the survival of sub-surface remains even after the completion of the pre-construction investigations. Within these areas, ground-breaking activity during construction will be subject to close archaeological supervision. This will be in the form of archaeological monitoring (a watching brief) until it can be determined, in consultation with SYAS that no potential for preservation remains.

Roles and Responsibilities in Strategy Implementation

8.7.44 The **oWSI [EN011020/APP/5.16]** sets out the roles and responsibilities for implementation of all phases of the survey and mitigation works mentioned in this strategy. The Appointed Archaeologist working on behalf of the Applicant will be responsible for ensuring that Phase I and Phase II survey findings are reviewed and reported to SYAS and that adequate time is allowed to update the AIPS.

Annex A: Outline Archaeological Preservation Strategy

Purpose of this Outline APS

- 8.7.45 There have been great advances in solar farm design, engineering and construction techniques over the past decade. More recently this has been driven by the imperative placed on renewable energy, by the UK government, in meeting national net zero commitments, twinned with the need for balance and environmental sustainability. These advances have reduced the physical impact on the land selected for solar development, such that what was always a low impact form of development can now be very low impact or even, where required, negligible/no impact, without reducing scheme viability.
- 8.7.46 The benefits of this for buried archaeological remains are self-evident, but they include:
- Preservation of significant archaeological remains in situ, which is the optimum and most sustainable environmental outcome;
 - A reduced need for archaeological evaluation trenching and open area excavation, both of which, regardless of the intentionality behind them, result in a far greater level of archaeological disturbance/loss than the insertion of array piling;
 - The cessation of sustained archaeologically damaging agricultural activity, such as ploughing, subsoil ripping etc., with land taken out of arable production and put to grass; and
 - The implementation of developer-funded management strategies to preserve and protect significant archaeological remains for future generations.
- 8.7.47 In this context, this APS serves to formalise the strategy by which:
- Known significant archaeological remains identified for preservation in situ will be protected during installation, operation, and decommissioning; and
 - As yet unrecorded significant archaeological remains, such as might be identified during post-consent field investigations, and determined to warrant preservation in situ, will be protected during installation, operation, and decommissioning.
- 8.7.48 In summary, the strategy for both will include the use of non-intrusive infrastructure and a sensitive installation / decommissioning strategy, the detail of which is described in full.
- 8.7.49 This APS is to be maintained, and the measures it contains adhered to, by the Site administrator (the Client), or their successor(s) in title, through to point of decommission.

Definitions

- 8.7.50 The following terminology is used throughout this Appendix:
- Principal Contractor: the appointed groundworks contractor;

- Archaeological Clerk of Works: the Applicant appointed Archaeologist for the construction phase; and
- Curator: the archaeological advisor to the Local Planning Authorities (LPAs).

Curatorial Involvement

8.7.51 The Curator (SYAS) will:

- Monitor the implementation of the APS, on behalf of the LPA, to ensure that the agreed measures are adhered to and the stated aim of preservation in situ is achieved;
- Have the option to attend the Site, as required, during installation and decommission, to ensure that all relevant protective measures are in place and the archaeological remains are physically unaffected by construction activity; and
- Have the option to attend the Site during the operation phase, should any maintenance work or other activity with the potential to affect the preserved remains be required.

Overarching Preservation Strategy

8.7.52 As detailed in the introduction, this APS provides for both:

- *Known* significant archaeological remains, already identified for preservation in situ; and
- *Any currently unrecorded* significant archaeological remains, such as might be identified during post-consent field investigations, and determined to warrant preservation in situ.

8.7.53 The detail specific to both is described below and both are referred to hereafter as 'Preservation Zones'.

The Identification of Preservation Zones

8.7.54 If archaeological remains of such significance that they would warrant preservation in situ are identified during the post-consent trenching programme or inadvertently during construction, then the following initial process will take place:

- The Principal Contractor will inform the Archaeological Clerk of Works;
- The Archaeological Clerk of Works will inform the Client and contact the Curator;
- The Curator will assess the remains and advise as to whether preservation is warranted;
- If preservation in situ is warranted, then the Archaeological Clerk of Works, the Curator and the Applicant will liaise and agree the location and extent of the Preservation Zone;
- The Preservation Zone will be added to a Preservation Zone Register; and
- The Preservation Zone will be subject thereafter to the measures set out in this APS.

8.7.55 Alternatively, there would remain the option to exclude any infrastructure and construction activity from any newly identified Preservation Zones, if preferable to the Applicant and agreeable to the Curator.

Preservation Method

Array Bases

8.7.56 The methodology to be adopted for installation of the PV array bases will be as follows:

- Ballast plates will be placed on top of the ground surface, to help disperse the weight of the surmounting infrastructure and reduce any risk of compaction;ⁱ
- Pre-cast ballast blocks will then be positioned on the ballast plates to weight them onto the ground surface;
- The superstructure – rafters and bracing – will be affixed to the base by hand; and
- The PV panels will then be fastened to the array rafters by hand, securing them in position.

8.7.57 This method will negate the need for any ground disturbance, e.g., the insertion of piles, such as would have the potential to truncate/displace the underlying archaeological remains.

Cabling

8.7.58 The methodology to be adopted for installation of the electrical cabling will be as follows:

- A cable ladder/tray will be affixed to the rear of each row of arrays; and
- The cables behind each row of PV arrays will be secured to the cable ladder/tray.

8.7.59 Alternatively, if cable trays/ladders are not practicable:

- The cabling will be securely fastened to/suspended from the backs of the arrays by hand.

8.7.60 As with the baseplates and ballast bases, either of these methods will negate the need for any ground disturbance, e.g. the excavation of cable trenches, which would have the potential to truncate/displace the underlying archaeological remains.

Other Infrastructure

8.7.61 No other infrastructure would be installed within any defined Preservation Zones.

ⁱ A standard baseplate will exert approximately 1 pascal (newton per m²) of pressure on the ground. The worst-case scenario would therefore be circa 10mm of compression of the topsoil, with any deeper stratigraphy, including archaeological remains, not subject to compaction.

Installation Method

- 8.7.62 To ensure that the buried archaeological remains identified for preservation in situ are protected during the installation process, a sensitive installation strategy is to be implemented.
- 8.7.63 It will be the responsibility of the Principal Contractor to ensure that the below provisions are adhered to.

Prior to Construction

- 8.7.64 The preparatory measures to be enacted prior to the commencement of any construction work on site will be as follows:

Marking Out

- A qualified surveyor will mark out the Preservation Zone using a survey-grade DGPS system. The required level of accuracy will be +/- 0.01m.

Demarcation

- The boundaries of the Preservation Zone will be re-enforced and physically demarcated by the erection of a suitably robust boundary. As a minimum, this will comprise the equivalent of HERAS fencing; and
- The boundaries will remain in place while construction activity is taking place outside the Preservation Zone, to protect those zones from inadvertent damage e.g. during the operation of plant, from machine tracking etc.

Signage

- Signage will be placed at regular intervals along the length of the barriers erected around the Preservation Zone, in order to communicate to the construction team that the areas within are of archaeological interest, that access is restricted and that special operating measures apply.

Briefing

- All site personnel will be informed of the archaeological constraints on site and the mandatory protection measures that are to be adhered to.
- 8.7.65 This information will be delivered verbally, i.e. during a site induction and regular Toolbox Talks, and in writing, via any induction documentation and the Construction Management Plan.

Acknowledgment

- 8.7.66 All relevant site personnel will sign under the relevant part of the induction documentation and/or Construction Management Plan, to acknowledge that:
- They have been informed of the archaeological constraints on site;
 - They have understood the nature of those constraints and their associated responsibilities; and
 - They will adhere to the preservation measures defined in this Archaeological Preservation Strategy.

Curatorial Inspection

- 8.7.67 Once the above pre-construction measures have been implemented:

- The Curator is to be informed and offered the opportunity to visit the Site and inspect the measures as implemented; and
- No construction work is to take place, within the defined area, until the Curator has either made their inspection or provided written consent for the works to commence or 14 days have elapsed since the Curator was offered in writing the opportunity to visit the Site.

8.7.68 Should any deficiencies with the implementation of the pre-construction measures be identified by the Curator during their visit:

- These will be communicated to the Archaeological Clerk of Works and Principal Contractor directly;
- The Archaeological Clerk of Works will inform the client;
- The deficiencies identified are to be rectified by the Principal Contractor, to the satisfaction of the Curator;
- The Curator is then to be offered a further opportunity to visit the Site within 14 days and inspect the re-implemented measures; and
- No construction work is to commence, in the defined area, until the Curator has provided written consent for the works to commence or 14 days have elapsed since the Curator was offered in writing the opportunity to revisit the Site.

During Construction

8.7.69 Where preservation is achieved by means of exclusion as opposed to the use ballast bases, including in relation to Preservation Zones 1 and 2, all infrastructure and construction activity will be excluded from within their footprint.

8.7.70 Where ballast bases are to be used across a Preservation Zone, the measures to be enacted *during construction* within that Preservation Zone will be as follows.

Conditions

- Installation activities within the Preservation Zone will only take place when the ground conditions are suitable;
- Ahead of any installation/construction activities taking place in the Preservation Zone each day, the condition of the ground within those zones will be inspected (on foot);
- Ideal ground conditions will be when the soil is dry, even, and compact. Should the ground be wet then consideration must be given to whether construction activities can take place within the Preservation Zone without risk to the underlying archaeological remains;
- If there is the realistic potential for the underlying remains within the Preservation Zone to be affected, e.g. by machine movements churning into the topsoil, then no construction activity must take place until the conditions have sufficiently improved;
- No construction activity is to take place within the Preservation Zone if the ground is saturated, or if there are areas of standing water; and
- If the conditions are not ideal but, on inspection, there is no reasonable potential for the underlying remains to be affected then construction activity

can take place within the Preservation Zone in accordance with the other measures provided in this Preservation Strategy. However:

- Should the conditions subsequently deteriorate, the ground conditions within the zones must be re-inspected and the potential for the underlying remains to be affected by construction activity re-assessed; with; and
- The Principal Contractor seeking advice from the Archaeological Clerk of Works and, if it is decided it is necessary, undertaking a site inspection to make a determination.

Plant

- All heavy plant machinery will be excluded from the Preservation Zone;
- Lightweight vehicles will be used to install the necessary infrastructure within the Preservation Zone; and
- Where lightweight tracked machinery is needed, then rubber tracks will be used or machinery with tracks that will not penetrate ground to a depth where buried archaeology may be affected.

Ground Protection

- Construction-grade matting / road plates will be used within any Preservation Zones. These will be laid out in advance of any machinery entering the zones, and to a pre-defined configuration, i.e., one row of matting / plates behind each row of PV arrays; and
- All vehicular movements will be restricted to those matted / plated areas.

Placement of Bases

- Ballast plates will be placed on top of the ground surface, to help disperse the weight of the surmounting infrastructure and reduce any risk of compaction;
- Pre-cast ballast bases will then be placed on the ballast plates to weight them onto the ground surface;
- The array superstructure – rafters and bracing – will be affixed to the bases;
- The PV panels will then be fastened to the array rafters by hand, securing them in position; and
- The above will be undertaken in a pre-defined order/sequence designed to minimise, to the extent possible, machine movements and construction activity within any Preservation Zones.

Cable Attachment

- The cable ladders/trays will be affixed to the rear of the rows of PV arrays by hand, or using light machinery;
- The cabling will then be secured to the cable ladders/trays by hand; and

- Alternatively, if suspended cabling is preferable, the cabling will be securely fastened to / suspended from the backs of the arrays by hand.

Curatorial Inspection

8.7.71 Once Construction has commenced, the Curator is to be informed, and offered the opportunity to visit the Site as follows:

- Prior to the installation of the infrastructure within the Preservation Zone;
- At a pre-agreed time during the installation of the infrastructure within the Preservation Zone, with reasonable advance notice (no less than one week) provided by the Client / Principal Contractor to the Curator; and
- Subsequent to the installation of the infrastructure within the Preservation Zone.

8.7.72 No construction work is to take place within the Preservation Zone until the Curator has been offered the opportunity to visit the Site prior to installation and has provided a response.

8.7.73 Should any deficiencies with the implementation of the measures, or the application of the provisions of this APS, be identified by the Curator during their visit:

- These will be communicated to the Archaeological Clerk of Works and Principal Contractor directly;
- The Archaeological Clerk of Works will inform the client;
- The deficiencies identified are to be rectified by the Principal Contractor, to the satisfaction of the Curator;
- The Curator is then to be offered a further opportunity to visit the Site and inspect the re-implemented measures; and
- No construction work is to continue within the areas of concern to the Curator until the Curator has provided written consent for the works to commence or at least one week has elapsed since the Curator was given written notice of the readiness for inspection of the re-implemented measures.

References

- ¹ Association of Local Government Archaeological Officers (and other partners) - Archaeology and Solar Farms Good Practice Guide: Advice for developers, archaeological advisors, consultants and contractors (2026):
<https://www.archaeologists.net/sites/default/files/2026-04/Archaeology-and-Solar-Farms-GPG---FINAL-2026-04-14.pdf>
- ² Association of Local Government Archaeological Officers (and other partners) (2026)



WHITESTONE
solar farm

Contact

Whitestone Net Zero Ltd

info@whitestonesolarfarm.co.uk

0800 688 9936