



| Client | Hob Lan | Hob Lane Solar Farm Ltd | |
|------------------|---|--|--|
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Summary

Heritage Archaeology Ltd has undertaken an historic environment assessment for a proposed solar farm at Hob Lane, on land north and south of Rake Lane, Dunham-on-the-Hill. This report provides a combined assessment for built heritage, archaeology and historic landscape character.

There are no designated heritage assets within or adjacent to the application site. The distance of separation and intervening mature hedgerows, trees and topography prevent any significant intervisibility between the proposed solar farm and designated heritage assets within a 3.5km study area and the application site is not within the settings of these assets.

The application site consists of farmland within an area that was, in part, within Dunham Moss, and lies between the historic villages of Elton, Dunham-on-the-Hill and Hapsford. The Roman road from Chester to Wilderspool (Warrington) passes within 1km of the application site. There are however no known settlement sites from the prehistoric, Roman or medieval period within or adjacent to the application site. During the medieval and post medieval period it appears to have been an area of agricultural or marginal land, enclosed prior to the early 19th century for farming. The original field pattern has been significantly altered through boundary loss.

The tithe map and apportionment record the field name 'Brick Kiln Common' indicating that a kiln site may have been located within the area of the proposed development. Two township boundaries also cross the application site; the Hapsford / Elton boundary follows a hedgerow in the northern part of the site and the Hapsford/ Dunham-on-the-Hill boundary follows Rake Lane through the site. These are assets that have locally significant historic and archaeological interest and are of low value.

During the Second World War land at Dunham-on-the-Hill was developed as a Royal Ordnance Factory dispersed ammunition storage area (ROF site). The former extent of the ROF site partially overlaps with the application site. The application site includes 11 of the extant brick and concrete metal framed store buildings, five of which have bunds intended to protect the rest of the ROF site in the event of the stored ammunitions exploding. The buildings were linked by an internal railway. The tracks have been lifted but the railway routes can be seen in aerial photographs and on Lidar images. This non-designated asset is of moderate value.

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1 Introduction

- 1.1. This report has been prepared for Belltown Power on behalf of Hob Lane Solar Farm Ltd to provide an historic environment assessment for the proposed Hob Lane Solar Farm development on land north and south of Rake Lane, Dunham-on-the-Hill, Cheshire. The proposed development comprises the construction and operation of a 30MWac solar photovoltaic ("PV") farm with associated infrastructure and landscape and ecological enhancements, for a temporary operational period of 40 years.
- 1.2. This assessment provides a combined heritage assessment and archaeological desk-based assessment. It considers the likely effects of the proposed development described above on known and potential archaeology and built heritage (collectively known as heritage assets) and effects that could arise as a result of development within the setting of heritage assets.
- 1.3. This assessment aims to provide an archaeological desk-based assessment, and heritage assessment, in accordance with Cheshire West and Chester Council's pre-application advice. The key objectives are to determine, as far as reasonably possible from existing records, the nature, extent and significance of any heritage assets that could be affected by development within the site. The assessment also assessed baseline historic environment data for a 1km study area to evaluate the potential for previously unrecorded heritage assets to be present within the site.

Site location

1.4. The application site is situated on land North and South of Rake Lane, Dunham-on-the-Hill, Chester, national grid reference Easting: 346360, Northing 373852. The site comprises 77 hectares of agricultural land in arable and pasture uses. The site is within the parishes of Elton and Dunham-on-the-Hill and Hapsford, Cheshire. The local planning authority is Cheshire West and Chester Council (CWaCC). The relevant Historic Environment Record (HER) is held by Cheshire shared services Archaeological Planning Advisory Service (CAPAS) who also advise CWaCC on archaeological matters.

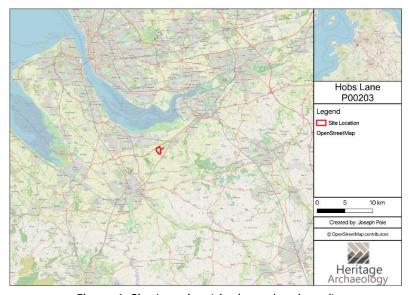


Figure 1: Site Location (site boundary in red)



Policy and guidance context

The National Planning Policy Framework (NPPF), 2023

- 1.5. The National Planning Policy Framework (NPPF), December 2024, sets out the relevant national policy provisions for the historic environment in Chapter 16. The following sections are relevant to this assessment:
 - 1.5.1.Paragraph 207: An applicant should describe the significance of any heritage assets affected by a planning application, the level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.
 - 1.5.2.Paragraph 212: When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.
 - 1.5.3.Paragraph 213: Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification.
 - 1.5.4.Paragraph 215: Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.
 - 1.5.5.Paragraph 216: The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.
 - 1.5.6.Paragraph 218: Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible.

Local Plan

- 1.6. The Cheshire West and Chester Local Plan (2015) Part 1 includes Policy EN5: Historic Environment. The policy sets out that "Development should safeguard or enhance both designated and non-designated heritage assets and the character and setting of areas of acknowledged significance. The degree of protection afforded to a heritage asset will reflect its position within the hierarchy of designation"
 - 1.6.1. Section 17 in Part 2 of the Plan includes detailed policy DM 48. Non-designated heritage assets. This identifies that "Development which would remove, harm or undermine the significance of ... non-designated heritage assets, or their contribution to the character of a



- place, will only be permitted where the benefits of the development outweigh the harm having regard to the scale of the harm and significance of the non-designated heritage asset."
- 1.7. The Dunham on the Hill and Hapsford Neighbourhood Plan was submitted to CWaCC in January 2025 for a final period of public consultation. Paragraph 3.6.3 of the draft Neighbourhood Plan sets out that "More recent history is represented by the extensive remains of the World War II munitions facility, photographs of which appear in Appendix C. With specific reference to these buildings, it is noted in this plan that development in and around these buildings that would preserve, and potentially maintain or enhance, the architectural integrity of the building would be considered and most likely supported." The Neighbourhood Plan proposes Policy DHH6 Local Heritage Assets, which aligns with the NPPF. This emerging policy has been taken into account in the assessment provided below.

Best practice and guidance

- 1.8. The following guidance documents have been referenced in preparing this report:
 - Historic Environment Good Practice Advice in Planning 2 (GPA2): Managing significance in decision-taking in the historic environment, Historic England, 2015;
 - Historic Environment Good Practice Advice in Planning 3, 2nd Edition (GPA3): The Setting of Heritage Assets, Historic England, 2017;
 - Conservation Principles: Policy for the Sustainable Management of the Historic Environment, Historic England 2008;
 - Chartered Institute for Archaeologists, Standard and guidance for historic environment desk-based assessment, CIFA, 2020; and
 - Statements of Heritage Significance: Analysing Significance in Heritage Assets, Historic England Advice Note 12, Historic England 2019.
- 1.9. Historic England, in GPA2 (pages 2-8), provides advice on the assessment of significance as part of the application process. The guidance notes that it is important to understand the nature, extent and level of significance of heritage assets (the heritage value) that may be affected by development proposals.
- 1.10. Historic England, in HEAN12 Statements of Heritage Significance, sets out that heritage interest comprises the following:
 - Archaeological interest (evidential value): There will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.
 - Architectural and artistic interest (aesthetic value): These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of



- buildings and structures of all types. Artistic interest is an interest in other human creative skills, like sculpture.
- Historic Interest (historical and communal value): An interest in past lives and events (including pre-historic). Heritage assets can illustrate or be associated with them. Heritage assets with historic interest not only provide a material record of our nation's history but can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity.
- 1.11. GPA 3 *The Setting of Heritage Assets* advises a staged approach to assessing effects on the setting of heritage assets. The key principles and method (including the '5 step' approach outlined below) were followed in completing this assessment.
 - Step 1: Identifying the heritage assets potentially affected and their settings;
 - Step 2: Assessing whether, how and to what degree settings make a contribution to the significance of the heritage assets;
 - Step 3: Assessing the effect of the proposed development on the setting, and therefore the significance, of the assets;
 - Step 4: Maximising enhancement and minimising harm, and;
 - Step 5: Make and document the decision and monitor outcomes.



2 Method of assessment

Study area

- 2.1. Data on designated heritage assets was obtained for the development site and a buffer of 1km. This is the area in which it is anticipated historic environment effects could occur given the scale of the potential development and surrounding topography.
- 2.2. Data on designated heritage assets was also obtained for a study area of 3.5km and an initial 'step 1' assessment undertaken to determine whether the proposed development would be capable of affecting the contribution made by setting to the heritage value of those assets.
- 2.3. Data on non-designated heritage assets was also obtained for the development site and a buffer of 1km. This study area was designed to include assets adjacent to the site but with the potential to extend into it, also to place known assets into a wider context, and to provide context when considering the archaeological potential of the development site. It also allowed consideration of effects on the settings of non-designated heritage assets. This study area was informed by a preliminary appraisal of baseline data.

Data sources

- 2.4. The following data sources were consulted in compiling this report:
 - The Cheshire Historic Environment Record (HER);
 - The National Heritage List for England, held by Historic England;
 - The National Record of the Historic Environment, maintained by Historic England and viewed via the Heritage Gateway website;
 - The Ordnance Survey map sequence (19th and 20th century) at 1:10000. 1:10560, 1:2500 and 1:1250 scales;
 - Tithe maps (and apportionments);
 - English Place Name Society volumes or similar authoritative works covering place names of the study area;
 - Geological maps of the study area;
 - Previous archaeological interventions records relating to sites in and immediately adjacent to the study area;
 - Other published works, grey-literature reports and other information relevant to the desk-based assessment;
 - Relevant local plan data held by Cheshire West and Chester Council (e.g., conservation area appraisals, Local Plans);
 - The Cheshire Historic Environment Character Zones data (provided as part of the HER consultation); and



- Portable Antiquities Scheme data, available from the PAS website.
- 2.5. A full bibliography is provided in Section 7, below.

Site visits

- 2.6. Two site visits were undertaken, one during the initial feasibility assessment stage and one for a more detailed walkover survey to inform the detailed assessment. The site visits were undertaken to assess:
 - The nature of the surroundings of heritage assets within the vicinity of the development area, to determine the contribution made by setting to the significance of those assets (including visual and functional relationships with other heritage assets, formal design, openness, integrity and change over time);
 - The way the assets are appreciated, experienced and understood in terms of the contribution made by setting to significance (including views, visual prominence, associated attributes, and intentional inter-visibility with other assets).
 - The extent, condition and character of known heritage assets within the site, as far as reasonably possible;
 - The potential for the site to include previously unrecorded heritage assets; and
 - Any health, safety or environmental considerations relevant to future field work or archaeological/ built heritage potential.

Determining the level of effect

2.7. The level of effect on a heritage asset has been determined by assessing the heritage value of the asset, then comparing that to the predicted magnitude of change (the impact).

Establishing heritage value (receptor importance)

2.8. An assessment of the heritage values of the assets within the baseline data, and the contribution made by setting to those values, has been undertaken. The value of the historic asset is described in terms of its heritage interest. Determining heritage significance is a professional judgment.

| Receptor Importance | Description |
|------------------------|--|
| Very High | Internationally important resources and designated assets of the highest significance, likely to include Grade I and II* listed buildings, Grade I and II* registered parks and gardens, World Heritage Sites. |
| High | Nationally important resources, Grade II Listed Buildings, Conservation Areas, Grade II Registered Parks and Gardens, scheduled monuments, registered battlefields. |
| Moderate | Regionally important resources, non-designated historic assets and landscape features with high or moderate evidential, historical, and/ or aesthetic values. |
| Low | Locally important resources: Non-designated historic assets and landscape features with low evidential, historical, and/or aesthetic values. |
| Negligible | Assets with very low or no evidential, historical, and/ or aesthetic values, or where remains are known to have been significantly altered or destroyed. |



Magnitude of impact

- 2.9. The magnitude of impact in relation to the historic environment relates to harm to or loss of significance through alteration or destruction of the historic asset or development within its setting. The former relates to any direct physical harm, including total or partial loss of the asset. Where the development only affects the setting of the asset there is no direct physical harm, but loss of or change to the asset's setting can (where setting contributes to the significance of the asset) result in a reduced ability to experience and understand the asset's heritage significance.
- 2.10. Assessing the impact of the proposed development in relation to the historic environment baseline has been considered in relation to the following criteria and is a professional judgement made with reference to the relevant guidance referred to above.

| Magnitude | Definition |
|------------|--|
| High | Total loss or substantial harm to key elements of the heritage interest of the asset or features or characteristics of the baseline (pre-development) conditions such that the adverse impact seriously affects a key element of its special interest of the asset; post development character or composition or attributes of baseline will be fundamentally changed. |
| Moderate | Partial loss or harm to one or more important elements or features or characteristics of the baseline (pre-development) conditions such that post development character or composition, or attributes of baseline will be significantly changed. |
| Low | Minor loss. Change arising from the loss or alteration will be discernible but underlying character or composition or attributes of the baseline condition will be similar to predevelopment circumstances or patterns. |
| Negligible | No loss or alteration. Change not distinguishable or does not result in loss of heritage significance. |

Significance of effect

2.11. Professional judgement has been applied in determining the overall significance of effect within the broad categories identified by the below matrix. The assessment takes into account the relative value (significance) of the asset, the contribution made by setting to that value, and the predicted magnitude of effect that would result from the proposed development.

| Magnitude of | Importance of receptor | | | | | |
|--------------|------------------------|-----------------------------|----------------------|------------|------------|--|
| effect | Very High | High | Moderate | Low | Negligible | |
| High | Major | Major or Moderate | Moderate | Minor | Negligible | |
| Moderate | Major | Major or Moderate | Moderate | Minor | Negligible | |
| Low | Moderate | Moderate or Minor | Moderate or Minor | Negligible | Negligible | |
| Negligible | Minor | Minor or Negligible | Negligible | Negligible | Negligible | |

2.12. In policy terms (NPPF paragraph 214 and 215), harm to the significance of a designated heritage asset can be substantial or less than substantial. Planning practice guidance identifies that



substantial harm is a high test. This is normally associated with total loss of a heritage asset's significance and will generally be equivalent to a major effect in the scale set out above. Less than substantial harm is a broader spectrum, with negligible effects at the lowest end of the scale and medium level effects at the higher end.

Limitations and appraisal of the assessment method

- 2.13. Archaeological evidence is often buried and invisible from the ground surface. In common with any desk-based assessment, it is therefore possible that the extent, character and significance of an asset could be poorly understood or vary from that described in the consulted data sources. A reasonable worse case has been taken in the assessment that follows, and professional judgement used to determine the likely significance (or value) of heritage assets where the precise nature of the asset is not known.
- 2.14. Data from the Portable Antiquaries Scheme has been searched, but the locational information is restricted. The data is therefore referenced in terms of the archaeological context of the site but has not been included in the gazetteer of known heritage assets.
- 2.15. Evidence from aerial photographs is limited by ground conditions, weather and seasonal variations. The visibility of cropmark features will depend on these factors and on the nature of the archaeology and it is understood that cropmark evidence is only one factor in determining the potential for archaeology within a study area.
- 2.16. Nonetheless, the combined data sources, aerial photograph assessment and walk over survey have been drawn from sources generally considered to be reliable and therefore to provide an accurate description of baseline conditions for the historic environment that is suitable for the purpose of assessment.

Consultation

2.17. Cheshire West and Chester Council has provided a pre-application advice letter in relation to the proposed development. The following comments are relevant to this assessment:

Heritage Impacts

Heritage is discussed in Section 5.2 of the pre-Application Supporting Statement. This recognises that the solar farm would be established within the extensive remains of a Second World War ammunition storage facility (ROF Dunham on the Hill), which comprises various buildings widely dispersed across the site. This is a non-designated heritage asset. In line with Local Plan LP2 Policy ENV 5, Policy DM 48 states that development proposals will be encouraged and supported where they are designed to preserve or enhance the significance of non-designated heritage assets.

The Conservation Officer commented that should an application be forthcoming; the heritage statement should describe the significance of the ammunition storage facility and any other identified heritage assets within the site, as well as consideration of the



impact of development and any necessary mitigation. This should also include details of the scope of any building recording that would take place.

The Conservation Officer raised no concerns in relation to impacts on the setting of any heritage assets outside the site boundary.

Archaeology

In addition to the brick-built ammunitions storage buildings associated with ROF Dunham-on the Hill, the Archaeology Officer noted that other non-designated heritage asset features within the site include the remains of a railway connecting the individual structures. The site is recorded in the Cheshire Historic Environment Record (CHER 4217) and, although the complex does not benefit from any statutory designation, they considered it may be of regional significance, and is the best-preserved example of this class of monument in Cheshire.

The Archaeology Planning Advisory Service (APAS) welcome the invitation to discuss the scope of the proposed heritage assessment and any further mitigation. With this in mind, APAS noted that the heritage assessment might usefully include a consideration of the effect of the development on the setting of any nearby statutorily designated sites, the obvious example being Helsby hillfort (SM 1013292), which lies c 3.5km to the northeast of the proposed development.

2.18. The assessment that follows has been undertaken in accordance with the above advice and follows the relevant best practice and guidance.



3 Archaeological and historic context

- 3.1. The geology of the Site is mapped by the British Geological Society (BGS) as mainly Kinnerton Sandstone Formation sandstone, with an area of Chester Formation Sandstone to the north. This is overlain by Till, Devensian Diamicton.
- 3.2. The application site is largely level and low lying, at approximately 12m Above Ordnance Datum (AOD). The site is bound to the north by the M6 Motorway, the parish boundary between Elton and Dunham-on-the-Hill and Hapsford crosses the northern part of the site on a north east south west alignment, following a field boundary for most of its route through the site. Rake Lane crosses the southern part of the site on an east west alignment. Both were formerly township boundaries, between Elton, Hapsford and Dunham-on-the-Hill. Hob Lane is to the south of the application site.

Prehistoric

- 3.3. Evidence for early prehistoric activity is attested to in the wider area, for example Palaeolithic and Mesolithic flint tools have been found in Chester. This period is characterised by groups of hunter-gatherer societies with temporary and seasonal settlements. Evidence for the period in the northwest of England and north Wales tends to be in the form of occasional finds and cave or rock shelter sites. Peat samples from Ince have been dated to the Mesolithic period (Asset A1).
- 3.4. The later prehistoric period is characterised nationally by a change from the early prehistoric nomadic hunting groups to more settled communities, with evidence emerging by the Neolithic period for settled farmsteads and land clearance for agriculture. No evidence for this period is recorded within the 1km study area.
- 3.5. The Bronze Age was a period of increased settlement and farming activity with evidence for metal working marking a transition from stone tools during this period. Also, changes to burial practices resulted in different types of ritual monuments being visible in the landscape. In Cheshire, hilltop settlements along the central sandstone ridge (of which Helsby Hillfort is one) are producing evidence that they were first settled in the Bronze Age. However, there is no recorded evidence for Bronze Age activity within the 1km study area.
- 3.6. During the Iron Age further technological advancements and apparently more structured social groupings become evident, with tribal identities being attributed to regional populations by later historians. Cheshire was part of the Cornovii territory. There are a number of defended hilltop enclosures (hillforts) along the central sandstone ridge and overlooking the Dee Estuary in Cheshire. In the lowland areas defended and open farmstead settlements have been identified. Again, there is no recorded evidence for this period within the 1km study area, although cropmark evidence within the study area could indicate that area was settled during the later prehistoric period (Assets A2 and A3).



Roman (Romano-British)

3.7. The Roman period began in Britain with the Roman invasion of AD43. The Romans established a military presence in the south of England and pushed north, founding a legionary fortress at Chester (Roman *Deva*) in the AD70s. The fort was built as a base for campaigns into north Wales. A civilian settlement was established around the fort and the town became one of the major centres of Roman Britain. Roman roads radiated from the town and fort, including a road from Chester to Wilderspool, near Warrington (identified by Margary¹ as route 701), which is recorded within the study area (Assets A4 – A8). Archaeological excavations at Chester Business Park identified a series of small, rectilinear enclosed fields accessed by a metalled road, demonstrating that there was a deliberate organisation of the landscape around the fort during the Roman period. It is not clear how far the influence of the fort extended into the surrounding landscape, but it is not uncommon for Roman settlement sites to be found along the roads radiating from major settlements. A coin find from Helsby, finds from Alvanley and a lead weight find from Dunham-on-the-Hill provide further evidence for Roman activity in the area (Assets A9-11).

Early medieval

- 3.8. The withdrawal of the Roman military and civic infrastructure from Britain in the early 5th century marked the end of the Roman period. Chester was an important civilian settlement by the end of the Roman period and is thought to have endured as a settlement and also possibly as an administrative centre. By the early 7th century it is documented that Chester was in the British kingdom of Powys. Chester is documented as having been raided by the Vikings and described as deserted in the 8th century, but by the 10th century was the site of a Saxon Minster (on the site of the medieval cathedral) and a fortified settlement.
- 3.9. Historic mapping shows a nucleated settlement pattern throughout the study area, with villages at Elton, Dunham-on-the-Hill and Hapsford. Place name evidence indicates that these settlements were established during the early medieval period, and Elton and Dunham-on-the-Hill are both recorded in the Domesday Book, with the entries noting that both were held prior to the Norman conquest. This does indicate activity in the area during the early medieval period. A cross shaft found at St Mary's Church, Thornton-le-Moor (Asset A12) dates to the early medieval period and provides further evidence for the establishment of settlements within the wider area during this period.

Medieval

- 3.10. The settlements established in the early medieval period developed as agricultural villages during the medieval period. The scheduled moat at Elton (Asset SM1) indicates a high status house in the village during this period. Hapsford is documented from the 13th century.
- 3.11. Finds from Dunham-on-the-Hill provide further evidence for the occupation of the village during the medieval period (Assets A14-15). The application site is likely to have been in use for

¹ Margary I, The Roman Roads of Britain, 1967



agriculture or as marginal land associated with the settlements at Hapsford, Elton and Dunhamon-the-Hill, as indicated by documentary evidence from the post medieval period.

Post medieval

3.12. The area of the Site is shown on Burdett's map of Cheshire 1794 as within an area of land between the settlements of Elton, Hapsford and Dunham-on-the-Hill.

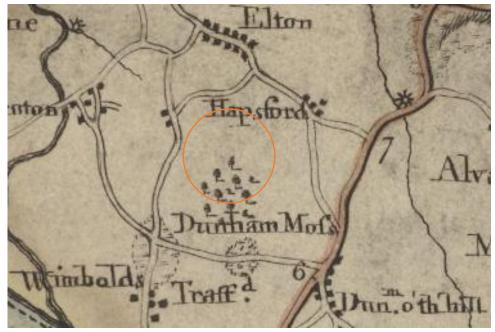


Figure 2: Burdett's Map of the County Palatine of Cheshire, 1794 (Reproduced with the permission of the National Library of Scotland)

- 3.13. The historic land use of the proposed development site is first documented in the post medieval period; 19th century mapping of the site shows it as a series of small enclosed fields. This is shown on the tithe map and apportionment, included as **Appendix A**, below. The enclosure pattern is different to the modern pattern, with smaller fields including field names such as 'Moss Field', which indicates that part of the site was enclosed from marginal land that formed part of Dunham Moss. The historic mapping shows a large number of ponds within the application site, which may be associated with marl pits, used to improve the land for agricultural purposes.
- 3.14. A number of buildings recorded within the study area date to the post medieval period, which also saw the development of the railway network (e.g. Assets A25 A27). Dunham-on-the-Hill, Hapsford and Elton continued to be largely agricultural settlements, and the site in use as farmland. A brick kiln is indicated by the tithe apportionment field name 'Brick Kiln Common' which may indicate the site of a temporary clamp kiln (Asset A33), and historic maps show some 'stones' which are no longer extant and could related to boundary markers, as well as roads (Common Lane and Rake Lane) and township boundaries (Assets A41 & A42) within the application site.



Modern

- 3.15. The application site lies within part of the Dunham-on-the-Hill Royal Ordnance Factory dispersed ammunition storage area (the ROF site) (Asset ID 37), which was built in c. 1941 as a dispersed ammunitions storage area. It comprises a complex of originally approximately 28 steel framed magazines with brick walls and concrete roofs. Approximately half of these buildings are surrounded by a large earth bank, which would have directed the force of any explosion upwards. The magazines were served by standard gauge railway lines which passed through the buildings to facilitate loading and unloading. The intervening hedgerows of the pre-existing field system were retained to break up the pattern of the facility from the air. An article in Subterranea (Issue 18, January 2009) provides a description of the site and its history. The site was established to store explosives imported into the Mersey ports and then transported by rail to ROF Dunham-on-the-Hill. The explosives were then sent on to filling factories such as those at Chorley and Fazakerley. The earthed bank buildings are Explosive Store Houses. Each storage shed was connected by rail with its own sidings and buffer stop. It was operational between, approximately, 1941 and 1959.
- 3.16. The article in Subterranea suggests that the site was used for storing ammonium nitrate between 1957 and 1958. The site closed in 1959. Track lifting was, according to the Subterranea article, carried out between 1963 and 1964, after which the site may have been used in conjunction with a Ministry of Agriculture, Food and Fisheries food store established at Dunham-on-the-Hill to the south of the ROF site. The site reverted to agricultural use and most of the rail track is no longer in situ, although some internal road surface and many of the buildings are still extant. The ROF site is divided by the M56 Motorway, constructed in the early 1970s.

Historic map regression

3.17. The 1830 map of Cheshire by Swire and Hitchings shows the site with Rake Lane and Common Lane shown. No buildings are depicted within the application site.

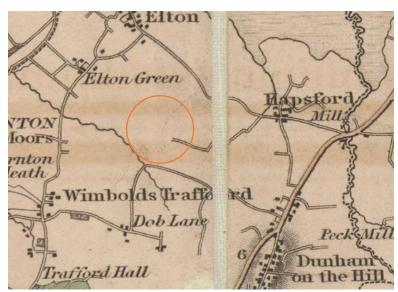


Figure 3: Swire, William. Hutchings, W. F. A map of the county palatine of Chester, 1828 and 1829 (Reproduced with the permission of the National Library of Scotland)



3.18. The Ordnance Survey historic map series shows the changes to the field pattern within the application site as the fields were amalgamated for more modern farming techniques, but the ROF site is not shown until later 20th century mapping. It is common for military infrastructure to be omitted from mapping. The ROF buildings and rail track can however be seen in aerial images of the ROF site from the mid-20th century.



Figure 4: Ordnance Survey County Series, 1873, 1:10,560

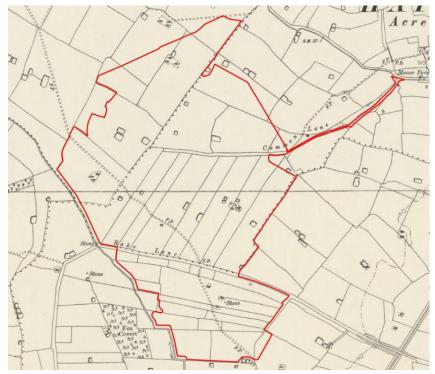


Figure 5: Ordnance Survey County Series, 1899, 1:10,560



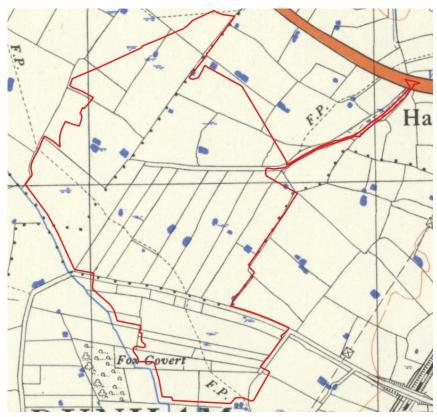


Figure 6: Ordnance Survey County Series, 1908-1949, 1:25,000



Figure 7: Ordnance Survey County Series, 1963, 1:25,000²

 $^{^{\}rm 2}$ Historic Ordnance Survey maps have been reproduced with the permission of the National Library of Scotland



Aerial photographs and Lidar

3.19. The buildings of the ROF site can be seen in aerial photographs, cropmarks of the removed rail tracks are also visible. The bunds surrounding the explosive stores are clearly visible in Lidar images.

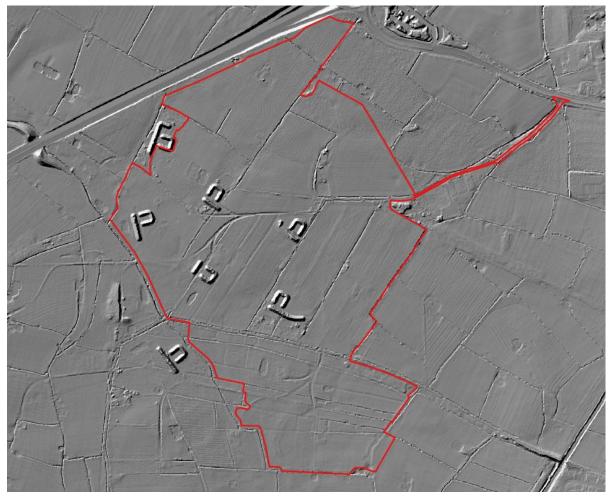


Figure 8: Environment Agency Open Data Lidar, Hillshade





Figure 9: Google Earth aerial image 1945



Figure 10: Google Earth aerial image 2021



Historic landscape character

- 3.20. The Cheshire Historic Landscape Characterisation project records the historic landscape character type of the application site as:
 - HCH4153 ancient fieldscapes (the northern part of the application site);
 - HCH4156 post medieval fieldscapes (the southern part of the application site), post medieval planned enclosure of marsh; and
 - HCH4475 ancient fieldscapes (the eastern part of the application site).
- 3.21. Parts of the application site historically had a pattern of small, narrow enclosures. These narrow strips are similar in form to 'moss rooms', remnants of peat cutting (the right of Turbary), where following the removal of the peat the land was enclosed into narrow strips. However, the historic mapping shows a significant degree of boundary change between the tithe map and current mapping, primarily as a result of boundary loss and field amalgamation.

Previous archaeological events

3.22. There are no recorded previous archaeological events within or immediately adjacent to the application site. The closest event to the application site was a palaeoenvironmental assessment at a proposed service station at Hapsford (event reference ECH3547). This revealed that some peat deposits were present in that location, but no archaeologically significant ecofacts were recovered.

Site visits

- 3.23. Following an initial reconnaissance visit undertaken at the feasibility stage, a walkover survey of the application site was undertaken in February 2025, each of the ROF store buildings was visited and photographed. A record of these is provided in Appendix B.
- 3.24. The extant buildings correspond to the 1945 aerial images, with one no longer having the bund shown in the historic aerial image (ID 9).
- 3.25. Additional buildings were identified during the walkover survey within the application site, comprising two small brick structures which may have been a sentry box and store or mess building and a larger brick store. Only one small section of in situ rail track was noted, in the extant track to the west of Common Lane (photographs, location and descriptions provided in Appendix B).
- 3.26. Rake Lane is overgrown and no longer a public right of way. A further track continues to the west of Common Lane, where a farm track has adopted the former rail track.
- 3.27. The hedgerow demarking the boundary between Hapsford and Elton townships is extant through the site as a hedge with trees, to the south of the farm track from Common Lane it is gappy and there is a short section where the field boundary has been removed.



4 Known heritage assets within the study area Designated heritage assets

- 4.1. There are no designated heritage assets within the site, or its immediate environs.
- 4.2. There are 15 designated heritage assets within the 1km study area. These are shown on Figure 12 and included in the gazetteer, both in Appendix C. The designated assets comprise:
 - Asset ID SM1, the moated site and fishponds at Elton. This is an earthwork site that includes the moated platform and a channel connecting the moat to an adjoining fishpond. The asset has high archaeological interest and is an asset of high heritage value. The asset's setting comprises the farmland in which it is experienced and the relationship between the moated site, which would have been a high status residence, and the village of Elton. The site is separated from the moat by the M56 motorway and given the intervening noise and movement of the motorway, distance of separation and intervening mature trees, the application site lacks any significant visual or functional relationship with the monument. The setting of the moated site and fishponds at Elton does not include the application site.
 - Asset ID CA1 is Dunham-on-the-Hill Conservation Area; the historic village core dates to the medieval period and the village has a character that relates to buildings of 17th to 19th century date. The conservation area has high historic and architectural interest. The conservation area appraisal notes that among the key features of the village are its location on a ridge and views towards the Helsby/ Delamere Hills to the east and over the Cheshire Plain to the west. The immediately surrounding fields convey the historic and architectural interest of Dunham-on-the-Hill as a predominantly agricultural village. The application site lies to the west of the A56 and railway line and is not within these immediately surrounding fields that convey and contribute to the heritage values of the conservation area. Longer views towards the Cheshire Plain include modern infrastructure and make a largely neutral contribution to appreciating the heritage value of the asset.
 - Asset IDs LB1, LB4-LB9, LB11 and LB12 are grade II listed buildings within the conservation area at Dunham-on-the-Hill. These buildings date to the 17th 19th century and convey the historic development of Dunham-on-the-Hill as a rural village. They have high historic and architectural interest and make a positive contribution to the heritage value of the conservation area. The setting of these buildings is their shared setting within the historic village core and the village streetscape and agricultural landscape in which they are experienced. The distance of separation, intervening A56 and railway, topography and mature trees prevent any significant intervisibility between the application site and these buildings and the application site is not within their settings.
 - Asset IDs LB2, LB3, and LB10 are grade II listed buildings at Hapsford comprising (respectively) Hapsford Hall, Barn at Hapsford Hall and Manor Farmhouse. These 17th – 18th century building have high historic and architectural interest. Their shared setting of these historic buildings within the village of Hapsford and the immediately surrounding rural landscape convey the historic and architectural context and interest of the buildings and makes a positive contribution to appreciating their heritage value. The distance of



separation, intervening A5117, topography and mature trees prevent any significant intervisibility between the application site and these buildings and the application site is not within their settings.

- 4.3. A 'step one' setting assessment identified that within 3.5km of the application site, there are a further three grade I listed buildings, four grade II* listed buildings and three scheduled monuments, as well as the conservation areas at Elton, Thornton-le-Moors and Ince. These are assets of the highest significance and have the potential for their settings to include wider views given their relative significance. These assets comprise:
 - Asset reference 1138810, grade I listed Manor House of Abbey of St Werburgh Chester including Old Hall and Monastery Cottages;
 - Asset reference 1279021, grade I listed Church of St Peter, Mickle Trafford;
 - Asset reference 1330242, grade I listed Church of St Mary, Thornton-le-Moors;
 - Asset reference 1138369, grade II* listed Rock Farmhouse, Elton;
 - Asset reference 1138815, grade II* listed Church of St James, Ince;
 - Asset reference 1145900, grade II* listed Trafford Hall with attached Service Wing and Carriage House;
 - Asset reference 1009635, scheduled monument, Ince Manor monastic grange and fishpond;
 - Asset reference 1013292, scheduled monument, Promontory fort on Helsby Hill 250m north west of Harmers Lake Farm; and
 - Asset reference 1014723, scheduled monument, Roman fortlet at Ince 150m north east of Hall Farm.
- 4.4. A 'step two' appraisal of the above noted that the settings of these assets, while broad, does not include the application site, given the distance of separation and intervening modern infrastructure. Also, the zone of theoretical visibility (ZTV) (Figure 2 in the LVA) indicates that these assets would not have intervisibility with the proposed development.

Non-designated heritage assets

- 4.5. Data compiled from the Cheshire HER, Historic England Research Records and historic mapping has identified 53 non-designated heritage assets within a 1km study area buffered from the application site boundary. These are shown on Figure 12 and included in full in the gazetteer, both in Appendix C.
- 4.6. Four non-designated heritage assets are within or include the application site: Asset IDs A33, A37, A41 and A42:
 - 4.6.1.Asset ID A33 is the field name recorded by the tithe apportionment 'Brick Kiln Common'. This could indicate that the field was the site of a brick kiln, most likely a clamp kiln used on a short term basis to produce bricks used on that farm holding and locally. The field includes a pond on historic mapping that is no longer extant, but could indicate the



location of a backfilled extraction pit. This is an asset with archaeological interest at a local level (an asset of low value).

- 4.6.2.Asset ID A37 is ROF Dunham-on-the-Hill, a Second World War dispersed ammunition storage area. The application site overlaps with approximately one third of the former extent of the ROF site and includes 11 of the previously recorded ammunitions stores, of which five are bunded. A further three buildings were identified during the walkover survey and one section of rail track was observed in situ within a farm track. The standing buildings are interspersed with archaeological evidence, visible in lidar data and aerial photographs (Figures 7 – 9 above), for the internal railway system, although the track has been lifted. A group of buildings shown on Common Lane (outside of the application site and no longer extant) were annotated as 'Camp, disused' on later 20th century mapping and may have been the accommodation for the ROF site. The M56 was built through the former ROF site in the early 1970s and it has been used as farmland, with many of the buildings used as farm stores, during the later 20th and 21st centuries. A comparison between the 1945 and 2021 aerial images (Figures 8 and 9 above) shows that the site is largely intact. Although a large number of stores were established during the Second World War, ROF Dunham-on-the-Hill is a rare example of a dispersed explosive storage site. The site and buildings are of regional heritage value for particularly their historic interest. ROF Dunham-on-the-Hill is an asset of moderate value.
- 4.6.3.Asset IDs 41 and 42 are the former township boundaries between Hapsford and Elton and Hapsford and Dunham-on-the-Hill. These are, in part, preserved by a hedgerow and the route of Rake Lane. These are assets that have a small degree of historic and potentially archaeological interest at a local level (assets of low value).
- 4.7. The remaining 49 recorded non-designated heritage assets within the 1km study area are summarised below.
 - Asset ID A1: Layers of peat, dating to the Mesolithic and Bronze Age periods, identified in borehole cores at Hapsford;
 - Assets IDs A2 and A3: Undated cropmarks, potentially indicative of prehistoric or Roman activity;
 - Asset IDs A4 A11; The route of the Chester to Wilderspool Roman road, and Roman finds made within the study area;
 - Asset ID A12: The find of an early medieval cross shaft at St Mary's Church, Thornton-le-Moors;
 - Asset IDs A13 A17 & A40: Finds of medieval artefacts, a possibly medieval mill site and a medieval moat at Thornton-le Moors;
 - Asset IDs A18 A32: Post medieval buildings, finds and infrastructure;
 - Asset ID A34: The modern BICC Cables building at Helsby; and



- Asset IDs A35, A36, A38 and A39: Second World War searchlight battery sites, anti-aircraft batteries, bombing decoy site and the Buffer Depot 344E site at Dunham-on-the-Hill.
- 4.8. The above are assets that have historic interest at a local level, and in some cases archaeological interest at a local level. They are of low to negligible value.
 - Assets LLB1 LLB9: Locally listed buildings in Helsby and Dunham-on-the-Hill, dating to the later post medieval and modern period. These buildings have architectural and historic interest at a local level and are of low value. Their settings do not include the application site, given the distance of separation and intervening built form.

The archaeological potential of the Site

- 4.9. There is very little evidence for prehistoric or Roman activity within or close to the application site. The potential for these periods is considered to be low, although it cannot be ruled out. The southern part of the application site is within the former Dunham Moss, in this area there is some potential for deposits with palaeoenvironmental interest to be present although it is noted that the moss has been enclosed as farmland since at least the early 19th century.
- 4.10. There is documentary evidence for early medieval and medieval settlement within the vicinity of the Site. Settlement is likely to have been focused around the villages of Dunham-on-the-Hill, Hapsford and Elton. There is no evidence for settlement activity from this period within the application site and the potential for archaeological evidence for this period to be present is low.
- 4.11. Post medieval farming practice is evident within the application site; former field boundaries, township boundaries, and a possible brick kiln are documented by historic mapping. There is a high potential for archaeology within the site associated with post medieval farming practice.
- 4.12. During the 1940s a ROF explosives store was built within the area of the application site. This included a number of store buildings, magazines (explosive stores) and an internal railway providing access to each building. The rail track has been lifted, but a number of the stores, and the surrounding bunds, are still extant within the application site. The former rail tracks are evident in Lidar data and on aerial photographs, and there is a high potential for buried archaeology associated with this use of the application site.

Summary of historic environment interest and statement of significance

4.13. The known heritage assets within the application site comprise two township boundaries (Assets A41 and A42), a brick kiln site (Asset A33) and the former ROF Dunham-on-the-Hill dispersed ammunitions storage area (Asset A37). Asset A33 has archaeological and historic interest at a local level and is of low value. Assets 41 and 42 have historic and potentially archaeological interest, at a local level and are also of low value. Asset A37, the former ROF Dunham-on-the-Hill dispersed ammunitions storage area is a rare example of a dispersed explosive storage site from the Second World War. Its condition has been impacted by the construction of the M56 motorway and removal of the rail track that connected the stores. However, the site and



buildings are of regional heritage value for particularly their historic interest, which illustrates Second World War domestic infrastructure. ROF Dunham-on-the-Hill also has archaeological interest. It is an asset of moderate value.

- 4.14. The historic landscape character of the application site comprises ancient fieldscapes and post medieval fieldscapes, although there has been significant modification of the early 19th century field pattern through boundary loss. The extant hedgerow boundaries within the site largely align with the historic field pattern. However, the degree of modification is such that the historic landscape character of the application site is of negligible heritage value.
- 4.15. The application site is not within the setting of any heritage assets that makes a positive contribution to the asset's heritage value.
- 4.16. It is within the wider landscape surrounding the scheduled monument moated site and fishponds at Elton (SM1). The distance of separation and intervening motorway restrict the contribution made by the application site to this asset, as the more immediately surrounding fields convey its historic interest as the site of a once high status rural residence. The application site is not within the setting of this asset.
- 4.17. Dunham-on-the-Hill conservation area (CA1) includes views over the Cheshire Plain, which includes the application site. However, from within the historic core of the village there is no intervisibility with the application site and the application site is separated from the conservation area by a railway and the A56. This, and the distance of separation, are such that the application site does not contribute to understanding and appreciating the historic or architectural interest of the conservation area as a rural and agricultural historic settlement. The application site is not within the setting of this asset.
- 4.18. Helsby Hill scheduled hillfort allows for wide ranging views in all directions. Of these, the most relevant to appreciating the archaeological interest of this as one in a series of hillforts along the sandstone ridge, and with views towards the Mersey estuary are the views to the north and south which do not include the application site. The application site is not within the setting of this asset.



5 Assessment and conclusions

5.1. The construction and operation of a 30MWac solar photovoltaic ("PV") farm with associated infrastructure and landscape and ecological enhancements, for a temporary operational period of 40 years, is proposed on land north and south of Rake Lane, an area of 77 hectares. The solar array, battery, cabling, and accesses have the potential to impact any buried archaeology within the development footprint. The proposed development also has the potential to affect the value of a heritage asset through changes to the asset's setting.

Designated heritage assets

- 5.2. There are no designated heritage assets within or adjacent to the application site. There are 12 grade II listed buildings, one conservation area and one scheduled monument within 1km of the application site. A further three grade I listed buildings, four grade II* listed buildings, three scheduled monuments and three conservation areas lie within 3.5km of the application site. These assets are all of high or very high heritage value, relating to their architectural, archaeological and historic interest.
- 5.3. The distance of separation is such that the proposed development lacks any significant intervisibility with these assets, particularly given the location of the application site relative to these assets and the intervening distance of separation, mature hedgerows and trees. The proposed development would not affect the way in which these assets are experienced or understood or diminish the contribution made by setting to their heritage values.
- 5.4. The ZTV and viewpoints prepared for the Landscape and Visual Appraisal (LVA)have been cross referenced in reaching this conclusion. Particularly relevant are viewpoints 11 and 13 at Elton, are representative of the scheduled moat and fishponds (SM1). This shows that from these locations there would be very limited to no visibility, and glimpsed views would be across the M56 motorway.
- 5.5. Also viewpoint 1 at Helsby Hill scheduled monument Promontory fort (Asset reference 1013292), which shows that the proposed development would be viewed in the distance as part of the wider landscape, which includes larger scale infrastructure. The experience of this view would be unchanged.
- 5.6. Viewpoint 6 to the west of Dunham-on-the-Hill is representative of the conservation area and grade II listed buildings within it. This shows that the proposed development is largely screened in these views by trees and hedgerows, and that there is limited to no visibility.

Non-designated heritage assets

- 5.7. There are four non-designated heritage assets within the application site. The design of the proposed development has taken these assets into account, and they are preserved in situ as far as reasonably practicable.
 - 5.7.1. **Asset ID A33 'Brick Kiln Common'.** Field name indicating that the field was the site of a brick kiln, most likely a clamp kiln. This is an asset of low value. The former field extent shown on the tithe plan is within the array, and a high magnitude of change is therefore



possible. This would result in an effect of minor significance, before additional mitigation measures.

- 5.7.2. Asset ID A37 ROF Dunham-on-the-Hill, a Second World War dispersed ammunition storage area. The application site overlaps with approximately one third of the former extent of the ROF site and includes 11 of the previously recorded ammunitions stores, of which five are bunded. A further three buildings were identified during the walkover survey and one section of rail track was observed in situ within a farm track. The standing buildings are interspersed with an internal railway system, although the track has been lifted. ROF Dunham-on-the-Hill is an asset of moderate value.
- 5.7.3. The proposed development preserves all of the standing buildings in situ, with the array sitting within the surviving elements of the field pattern that was retained when the ROF site was developed. The field pattern, as currently extant, would therefore remain discernible as the setting of these buildings. Excavations during the construction phase of the solar farm have the potential to affect buried archaeology associated with the infrastructure between the storage buildings. Also, the change of use from agricultural to solar would change the settings of the buildings. These combined impacts would result in harm to the heritage values of the ROF site, as some of the landscape context would be lost, as would potential associated archaeological evidence. The effects arising from construction activites on buried archaeology would be permanent, effects resulting from the operation of the proposed development within the setting of the asset would be temporary (relating to the 40 year lifetime of the proposed project) and would be reversible on decommissioning. However the buildings and field pattern are retained, and only part of the former extent of the ROF site overlaps with the application site. Therefore the magnitude of change is concluded to be moderate, resulting in an effect of moderate significance, before additional mitigation measures.
- 5.7.4. Asset IDs 41 and 42 former township boundaries. These are, in part, preserved by a hedgerow and the route of Rake Lane. These are assets of low value. Rake Lane is not affected by the proposed development and the hedgerow that corresponds to the boundary between Hapsford and Elton is largely preserved, with only a short section where the hedgerow is now gappy or has been previously removed impacted, the landscape mitigation plan shows the majority of this boundary as retained and protected with some enhancement through tree planting. In relation to Asset ID 42 the significance of effect is none. In relation to Asset 41, a low magnitude of change is therefore predicted, resulting in an effect of negligible significance.
- 5.8. The historic landscape character of the site as currently exists, is retained within the layout of the proposed development, as the extant field pattern, ponds and hedgerows are largely retained throughout the site.
- 5.9. The application site has low archaeological potential, other than in relation to post medieval and modern assets discussed above. In addition, previous activities including the establishment of the ROF site and its subsequent removal, as well as farming activities, are likely to have already



impacted any archaeology that may have been present within the application site. While the possibility of archaeology pre-dating the post medieval period surviving within the application site cannot be ruled out, this potential does not indicate that the archaeological interest of the application site would preclude its development as a solar farm.

Mitigation

- 5.10. The results of the desk-based assessment indicate a low potential for archaeology within the application site predating the post medieval period. Archaeology relating to a former township boundary (Asset A41), a possible brick kiln (Asset A33) and infrastructure associated with ROF Dunham-on-the-Hill (Asset A37) is expected to be present within the application site and potentially impacted by the below ground works during the construction phase of the proposed development. Given the limited nature of the below ground excavations necessary for the proposed development, and that ROF Dunham on the Hill is well documented, it would be proportionate to these archaeological effects that a programme of archaeological work be secured as a condition of consent, and set out in a written scheme of investigation or project design. The archaeological work could be implemented during or in advance of development ground works commencing.
- 5.11. The archaeological interest and level of impact indicate that this would be a targeted programme of work, specifically aimed at providing a sample slot across the former township boundary, a small excavation of a sample area of the track associated with ROF Dunham on the Hill and field survey to identify, and if necessary mitigate, any archaeological evidence associated with the possible brick kiln.
- 5.12. The landscape mitigation embedded into the design of the proposed development (as set out in the Landscape Mitigation Plan) has taken the heritage interest of the ROF site into consideration and no further mitigation is advised in relation to the operation of the proposed development on the historic environment.

Consultation

5.13. The above recommendation is subject to further consultation with CWaC and CAPAS.



6 Summary and conclusion

- 6.1. The application site consists of farmland within an area that was, in part, within Dunham Moss, and lies between the historic villages of Elton, Dunham-on-the-Hill and Hapsford. The Roman road from Chester to Wilderspool (Warrington) passes within 1km of the application site. There are however no known settlement sites from the prehistoric, Roman or medieval period within or adjacent to the application site. During the medieval and post medieval period it appears to have been an area of agricultural or marginal land, enclosed prior to the early 19th century for farming. The original field pattern has been significantly altered through boundary loss.
- 6.2. The tithe map and apportionment record the field name 'Brick Kiln Common' indicating that a kiln site may have been located within the area of the proposed development. Two township boundaries also cross the application site; the Hapsford / Elton boundary follows a hedgerow in the northern part of the site and the Hapsford / Dunham-on-the-Hill boundary follows Rake Lane through the site. These are assets that have locally significant historic and archaeological interest and are of low value.
 - 6.2.1.The proposed development would preserve Rake Lane in situ and the former township boundary between Hapsford and Dunham-on-the-Hill is unaffected.
 - 6.2.2. The former township boundary between Hapsford and Elton largely follows a hedgerow across the application site that is preserved within the layout. A very short section, where the hedgerow is gappy or has already been removed, would be impacted. This would result in an effect of negligible significance.
 - 6.2.3. The possible site of a brick kiln lies within the footprint of the proposed development and a potential effect of minor significance is therefore predicted. Further mitigation through archaeological recording would reduce this predicted effect, and the residual effect would be negligible.
- 6.3. During the Second World War land at Dunham-on-the-Hill was developed as a Royal Ordnance Factory dispersed ammunition storage area (ROF site). The former extent of the ROF site partially overlaps with the application site. The application site includes 11 of the extant brick and concrete metal framed store buildings, five of which have bunds intended to protect the rest of the ROF site in the event of the stored ammunitions exploding. The buildings were linked by an internal railway. The tracks have been lifted but the railway routes can be seen in aerial photographs and on Lidar images. This asset is of moderate value.
- 6.4. The extant buildings associated with the ROF site are preserved within the layout of the proposed development. Excavations during the construction phase of the solar farm have the potential to affect buried archaeology associated with the infrastructure between the storage buildings. Also, the change of use from agricultural to solar would change the settings of the buildings. These combined impacts would result harm to the heritage values of the ROF site, although the buildings and field pattern are retained. Therefore an effect of moderate significance is predicted. This effect is mitigated through the layout and could be further mitigated through a proportionate and targeted programme of archaeological recording, during or in advance of the development ground works, as discussed in section 5.11. Archaeological recording could



- enhance our understanding of the ROF site and better reveal its significance. With the implementation of additional mitigation the moderate adverse effect would be reduced, and the residual effect would be minor. Consent is sought for a period of 40 years, after which the effect arising from development within the setting of this asset would be reversed
- 6.5. The application site is not within the settings of any of the recorded assets within the study area, given the distances of separation and intervening built form, trees and topography.
- 6.6. The proposed development is therefore consistent with the historic environment aims of national and local planning policy and with the emerging policies of the Dunham-on-the-Hill Neighbourhood Plan. The NPPF directs (at paragraph 216) that where impacts on non-designated heritage assets are predicted "a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset".



7 References, glossary and abbreviations

Time periods used are as follows:

Prehistoric: 500,000 BP - AD 43
 Mesolithic: 10,000 - 4,000 BC
 Neolithic: 4,000 - 2,200 BC
 Bronze Age: 2,600 - 700 BC

o Iron Age: 800 BC – AD 43

Roman: 43 – 410

Early medieval: 410 - 1066

Medieval: 1066 – 1540
 Post Medieval: 1540 - 1901
 Modern: 1901 - present

Abbreviations used are as follows:

- CA Conservation area
- HER Historic Environment Record
- LB Listed Building (LBII = Grade II listed; LBII* = Grade II* listed, LBI = Grade I listed)
- NDHA Non-designated heritage asset

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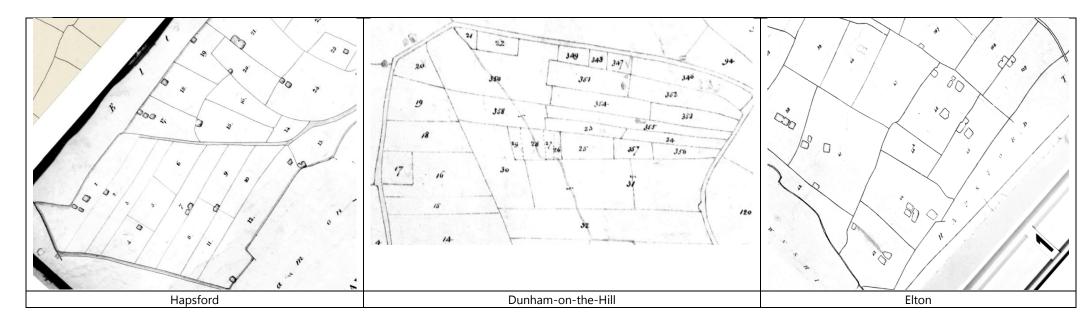
https://www.dunhamhillandhapsford.co.uk/



Appendix A Tithe map and apportionment

| | I | | on-the-Hill and Elton in the parish c | of Thornton in the Moc | |
|----------|-------------------|--------------------|---------------------------------------|------------------------|--------------------|
| Hapsford | 1839 | Dunham on the Hill | 1844 | Elton | 1840 |
| Plot | Description | Plot | Description | Plot | Description |
| 1 | Further Common | 21 | Inclosure (meadow) | 43 | Wood field |
| 2 | Further Common | 22 | Moss Allotment | 44 | Big seven acre |
| 3 | Common Field | 23 | Moss Field | 45 | Further five acre |
| 4 | Brick kiln common | 24 | Moss Field | 46a | Two acre |
| 5 | Further Common | 25 | In mean parts | 46 | Near five acre |
| 6 | Further Common | 26 | In mean parts | 109 | Further Abbotts Ha |
| 7 | Near Common | 27 | In mean parts | | |
| 8 | Lower Common | 28 | In mean parts | | |
| 9 | Common | 29 | In mean parts | | |
| 10 | Common | 30 | Higher Moss | | |
| 11 | Lower Common | 31 | Middle Moss Field | | |
| 12 | Long Common | 346 | Inclosure (pasture) | | |
| 14 | Triangle | 347 | Inclosure (arable) | | |
| 15 | Big Heath | 348 | Moss Allotment | | |
| 16 | Little Heath | 349 | Inclosure (meadow) | | |
| 17 | Heath | 350 | Moss Field | | |
| 18 | Heath | 351 | Moss Field | | |
| 19 | Heath Field | 352 | Moss Field | | |
| 20 | Two acres | 353 | Moss Field | | |
| | | 354 | Moss Field | | |
| | | 355 | Long Moss | | |
| | | 356 | Mean part | | |
| | | 357 | Mean part | | |
| | | 358 | Mowing moss | | |







Appendix B: Gazetteer of ROF Dunham buildings

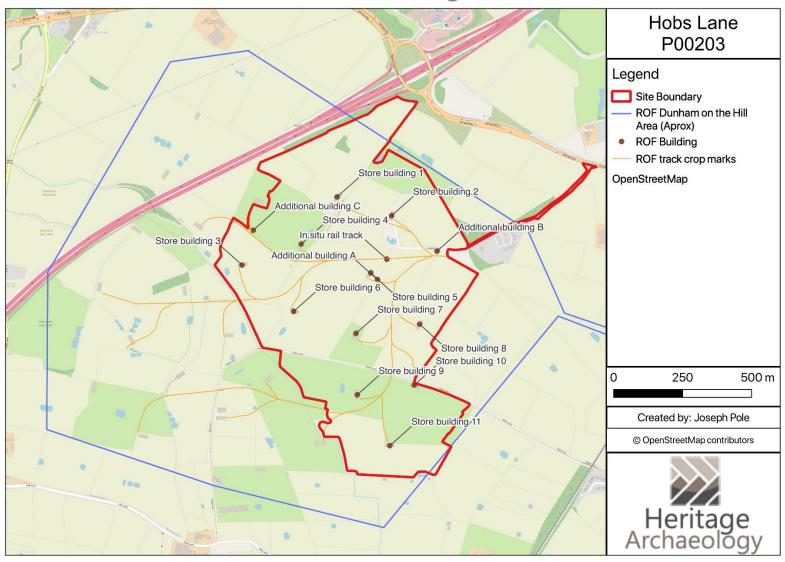


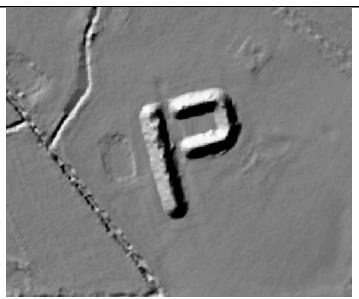
Figure 11: Locations of magazines and stores (ROF store buildings)



| Photograph | Lidar | Description |
|------------|-------|--|
| | | ID: 1 Description: No bund or tracks (no bund on historic AP, which shows single track leading into building). Condition: Fair/overgrown |
| | | ID: 2 Description: No bund or tracks (no bund on historic AP, which shows single track leading into building). Condition: Fair |







ID: 3

Description: Large bund with no track surviving. Bund shown on historic AP.

Condition: good





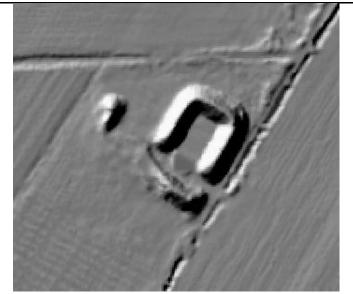
ID: 4

Description: Large bund with no track surviving. Bund shown on historic AP.

Condition: good







Description: Large bund with no track surviving. Bund shown on historic AP.

Condition: good but overgrown

ID: 5





ID: 6
Description: Large bund with no track surviving. Bund shown on historic AP.

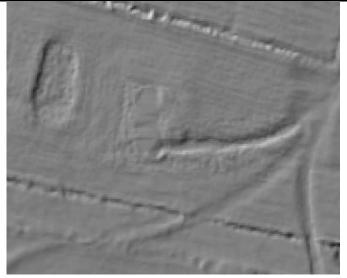
Condition: good but overgrown



ID: 7 Description: Large bund with no track surviving. Bund shown on historic AP. Condition: good ID: 8 Description: no bund with no tracks (no bund on historic AP). Condition: poor/fair overgorwn





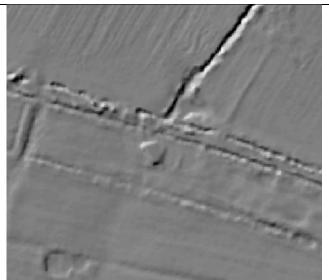


Description: no bund, but internal rail tracks in situ. This store is shown to have a bund on historic AP but none is extant now. The blast wall is intact.

Condition: poor

ID: 9





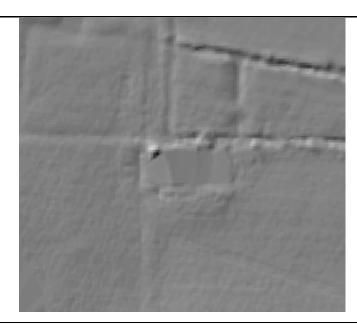
ID: 10

Description: no bund, internal rail tracks in situ (no bund on historic AP).

Condition: poor – overgrown, holes in walls







ID: 11

Description: no bund, internal rail tracks in situ (no bund on historic AP).

Condition: good



Additional photographs







Internal photograph of Building 9











Appendix C Gazetteer and location of recorded heritage assets

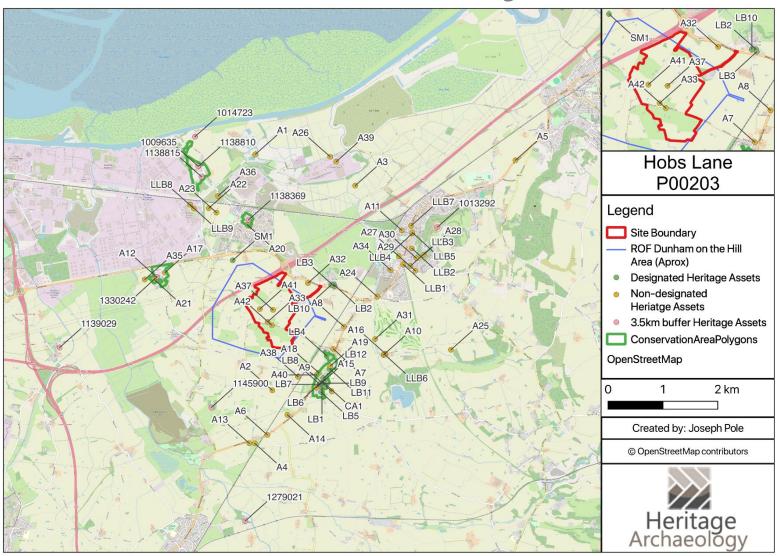


Figure 12: Known heritage assets within 1km study area



| Asset ID | Source ID | Status | Name | Description | Period | Easting | Northing |
|-------------|-----------|--------|--|---|------------------|---------|----------|
| SM1 | 1012122 | SM | Moated site fishpond and connnecting channel Elton | The monument at Elton comprises a moated site possessing a causeway and outer banks with an adjoining fishpond and connecting channel. The moated site at Elton consists of a slightly raised island c.30m square from which some stone foundations have in the past been removed. The island is surrounded on all sides by a moat c.12m wide x 1.7m max. depth. The W arm is marshy but elsewhere the moat is dry. A causeway gives access to the island across the N arm of the moat and wide outer banks exist on the N and S sides of the moat. A short distance to the N is a waterlogged/silted fishpond linked to the NW corner of the moat by a channel now utilised by a modern field drain. Most moats were constructed between 1250-1350 and are generally seen as the prestigious residences of the Lords of the manor. The moat in such circumstances marked the high status of the occupier and also served to deter casual raiders and wild animals. | Medieval | 345535 | 374828 |
| LB1 | 1115457 | LBII | ROCK COTTAGES | Pair of cottages, late C17th to C18th. Altered and added to at left end. Brown brick, slate roof, part on stone plinth, part on natural rock. 2 storeys. Ground floor has 4 windows. 3, 1st floor, 3-light timber casements. One door of 6 fielded panels, one boarded door. Brick eaves dentils. Possible remains of 1st floor band. Raised roof. | Post medieval | 347134 | 372500 |
| LB2 | 1138370 | LBII | HAPSFORD HALL | House. Appears C18th but according to Ormerod is post 1816. Incorporates earlier farmhouse. Altered and added to. Brick and stone, hipped slate roof, stone plinth and dressings. Front is in Flemish bond. 3 storeys, cellars and attic. 3 symmetrical bays. Sashes with glazing bars, except 2 1st floor windows have replaced cross casements. Stone cills, splayed stone heads. Central embattled stone porch projects forward. Stone band corresponds with chamfered stone band at top ot plinth. Moulded cornice on 2 consoles at sides of oval sunk panel. | Post medieval | 347374 | 374367 |
| LB3 | 1115133 | LBII | BARN AT HAPSFORD HALL | Barn C18th or early C19th. Brick, stone plinth, slate roof in 5 bays in ABABA rhythmn. 2nd and 4th bays have recessed arches with series of air vents arranged horizontally. Side and central bays have arched openings, one blocked, and have rebate for doors. Above each is round pitch hole with stone cill. Roadside is similar but has square ground floor windows in left and right bays, and blank pitch holes. From yard, central door leads to passage with arcade of 4 brick arches on left, beyond which are stalls for cattle. | Post medieval | 347384 | 374334 |



| Asset ID | Source ID | Status | Name | Description | Period | Easting | Northing |
|-------------|-----------|--------|--|---|------------------|---------|----------|
| LB4 | 1130685 | LBII | CHURCH OF ST LUKE | Church. 1860-1 by James Harrison in early C14th style. Sandstone, slate roof. Nave and chancel with bellcote at west end. South porch, north and south vestries. 3 bay aisleless nave windows have pointed heads and reticulated tracery. 2-light nave windows have plain leaded lights. 4-light west window and 3-light east window have stained glass. Outer porch doorway has hood mould with returned stops. | Post medieval | 347227 | 373075 |
| LB5 | 1138366 | LBII | TOWN FARM FARMHOUSE | Farmhouse, mid C18th. Altered and added to. Brown brick, and stone, slate roof, stone plinth, partly on natural rock. 2 storeys with cellars. 3 windows, 2 in main wing, one in cross wing. 3 light timber casements with splayed brick heads and stone cills. Door is centrally placed in main wing. Brick stacks are at rear and projecting at left hand end. Stone windowless bay at right end was formerly dairy and pantry. Interior: Double inglenook with heavily moulded bressumer are one side. Bead moulded and stop chamfered beams. Ledge and batten doors. | Post medieval | 347115 | 372418 |
| LB6 | 1138367 | LBII | PEAR TREE FARM HOUSE | House, late C18th to early C19th. Altered and added to. Brown brick, front in Flemish bond. Replaced concrete tile roof, sandstone plinth, 2 storeys and cellar. 3 windows, left hand window formerly a painted blank is now being inserted. Recessed sashes with glazing bars. Those at ground floor have arched brick heads. Door of 6 raised panels, below rectangular fanlight with glazing bars. Brick stacks on ridge. Interior: Rock cut cellar. One door of 6 panels, ledge and batten doors, L shaped hinges. | Post medieval | 347195 | 372661 |
| LB7 | 1330216 | LBII | SMITHY FARMHOUSE | Farmhouse. C17th altered and added to. Brown brick, stone plinth, part on natural rock, slate roof. 3 windows. 3-light timber casements have cambered heads. Replaced doorcase and door. Right hand end is altered and contains blocked 1st floor opening. First floor brick band. Diagonally set eaves dentils. Projecting stepped brick stack at left and is added. Replaced brick stack on ridge. Lean to additions at rear, one with access only at upper level via replaced timber ladder. | Post medieval | 347117 | 372559 |
| LB8 | 1115441 | LBII | STABLE RANGE AT SMITHY FARM | Stables and barns. Early to mid C19th, unaltered. Brick, slate roofs, blue brick dressings. Long range of stables has 3 stable doors and one plain door, all with glazed brick surrounds. 4 windows have arched heads and glazed brick cills. 3 loft openings. Left gable has ground floor and loft openings. | Post medieval | 347096 | 372560 |
| LB9 | 1138368 | LBII | FARMBUILDINGS NORTH OF STABLE RANGE AT SMITHY FARM | Stable with lofts. Early to mid C19th. Brick, slate roofs. One stable door and two windows at ground floor, and one centrally placed pitchole. | Post medieval | 347109 | 372581 |



| Asset ID | Source ID | Status | Name | Description | Period | Easting | Northing |
|-------------|-----------|--------|---|---|--------------------------------|---------|----------|
| LB10 | 1138371 | LBII | MANOR FARMHOUSE, Hapsford | Farmhouse. Late C17th with later alterations. Rendered brick, stone plinth, slate roof. 2 storeys with attics. 3 windows have 3-light timber casements, splayed heads have voussoirs and raised keystones. Door is replaced. Stacks are on ridge, behind doorway, and at left gable. Rendered plain bands at 1st and 2nd floors. Right gable has small attic casement beneath arched head, with raised keystone. Similar casement at rear. Interior. 2 inglenooks. One is enclosed, one has plain bressumer. Board door has L hinges. Doors of 5 panels. Stopchamfered beams. | Post medieval | 347324 | 374364 |
| LB11 | 1320406 | LBII | DUNHAMHALL FARMHOUSE | Farmhouse, dated 1696. Altered. Pebbledash on brick, stone plinth and dressings. Steeply pitched slate roof. 2½ storeys, 2 windows, one each side of projecting porch with closet above. Replaced timber casements. 1st and 2nd floor bands, now pebbledashed. Stacks midway on ridge and projecting at right side. Sandstone quoins, gable parapet and kneelers. Closet over porch has 2 small rectangular leaded casements, one on each side. Moulded stone parapet and kneelers over porch and closet, one perhaps reused. Studded door is set at back of porch which has stone seat on each side. Tablet inscribed WZH 1696. | Post medieval | 347275 | 372843 |
| LB12 | 1330217 | LBII | MANOR FARMHOUSE, Dunhamon-the-Hill | Farmhouse. Late C17th to early C18th. Altered. Rendered brick; stone dressings, steeply pitched concrete tile roof. 2 storeys with attics and cellars, 3 windows. Replaced casements, and centrally placed door. Eaves dentils. Rendered stacks at gable ends. Interior: Rock cut cellar with recessed shelves. Boarded cellar door has strap hinge. Some stop chamfered beams. Sophisticated close string dog legged stair has twisted balusters, newels have recessed panels, moulded cornice, finials and pendants, moulded rail. String has pulvinated frieze and coved cornice. Bolection moulded raised panels over Victorian grate and mantel in angle of north east room. | Post medieval | 347162 | 372669 |
| CA1 | N/a | CA | Dunham Conservation Area | The character of the area is rural and agricultural and the village within the Conservation Area has a feeling of ancient peace and tranquillity. It owes this in large measure to the by-pass to the West, now the A56. It is understood this was constructed in 1844 and widened in 1938. Thus through traffic has been wholly diverted for many years and Village Road remains narrow, with the old front boundary walls to the houses mostly untouched. | Medieval - post medieval | 347164 | 372596 |
| | 1138810 | LBI | MANOR HOUSE OF ABBEY OF ST WERBURGH CHESTER INCLUDING | Within 3.5km study area | | 344933 | 376548 |



| Asset ID | Source ID | Status | Name | Description | Period | Easting | Northing |
|-------------|-----------|--------|---|--|-------------------------------|---------|----------|
| | | | OLD HALL AND MONASTERY | | | | |
| | | | COTTAGES | | | | |
| | 1279021 | LBI | CHURCH OF ST PETER | Within 3.5km study area | | 345710 | 370092 |
| | 1330242 | LBI | CHURCH OF ST MARY | Within 3.5km study area | | 344157 | 374550 |
| | 1138369 | LBII* | Rock Farmhouse | Within 3.5km study area | | 345832 | 375561 |
| | 1138815 | LBII* | CHURCH OF ST JAMES | Within 3.5km study area | | 344986 | 376352 |
| | 1145900 | LBII* | TRAFFORD HALL WITH ATTACHED SERVICE WING AND CARRIAGE HOUSE | Within 3.5km study area | | 345117 | 372162 |
| | 1139029 | LBII* | CHURCH OF ST LAWRENCE | Within 3.5km study area | | 342365 | 373283 |
| | 1009635 | SM | Ince Manor monastic grange and fishpond | Within 3.5km study area | | 344924 | 376547 |
| | 1013292 | SM | Promontory fort on Helsby Hill 250m north west of Harmers Lake Farm | Within 3.5km study area | | 349267 | 375391 |
| | 1014723 | SM | Roman fortlet at Ince 150m north east of Hall Farm | Within 3.5km study area | | 344874 | 377082 |
| A1 | 15199 | NDHA | Mesolithic and Bronze Age Peat Layers, Ince | Layers of peat, dating to the Mesolithic and Bronze Age periods, were identified in borehole cores taken during ground investigation works. | Mesolithic - Bronze Age | 345970 | 376750 |
| A2 | 4536 | NDHA | Cropmark to the south of Moss House Farm | Sub circular ditched enclosure located circa 450m to the south east of Moss House Farm. The enclosure has a possible entrance located on the eastern side | Unknown, prehistoric | 346230 | 372460 |
| A3 | 1011 | NDHA | Undated enclosure in Helsby | An almost square enclosure approximately 60 metres wide is visible as a possible earthwork on an aerial photograph dating from 1945. The date and function of the enclosure is unknown. | Unknown, prehistoric | 347780 | 376160 |
| A4 | 188836 | NDHA | Roman Road-Chester to Wilderspool (Route 701) | Possible section of Roman road - Agger -the roman name for embankment built to allow drainage of the road surface. Could be simple earth structures or be many different layers of stone. Material for the agger was usually dug for a ditch on either side of the road | Roman | 345900 | 371500 |
| A5 | 2417/1/0 | NDHA | Roman Road-Chester to Wilderspool (Route 701) | A road was traced north-east from Chester to connect with the northern road through Warrington (Route 701) at the Roman settlement at Wilderspool. Traces of it were found at junction of Birkenhead Road and Parkside Road in Chester. It was then thought to run via Brook Lane to Hoole Bank. It then follows the road to Bridge Trafford where the agger (Roman road embankment) can be seen alongside at a few points. It is likely that a road | Roman | 350700 | 376590 |



| Asset | Source ID | Status | Name | Description | Period | Easting | Northing |
|-------|-----------|--------|--|--|-------------------|---------|----------|
| | | | | linked the Legionary fortress with Wilderspool and the river crossing there. While there are convincing road lines as far as Bridge Trafford, and from Preston on the Hill to Wilderspool, the intervening terrain is not suited to straight alignments and as such the road there has not been identified. | | | |
| A6 | 188837 | NDHA | Roman Road-Chester to Wilderspool (Margary Route 701)- Morley Bridge | Field at Morley Bridge called 'Pavement Heys' on 1844 Tithe Map. 1986 Dutton found pebbles in hard clay & possible kerbing stones. Parly overlain by A56 road embankment. 30/31 July 1988 excavation by Frodsham & District Local History Group revealed cambered agger with shallow metalling of hard-packed reddish clay with sparse scattering of small pebbles over a layer of sandstone chips, with reddish & yellow-gray clay beneath. The SE slope of the agger was overlain by hard pink clay with 3 large chunks of sandstone in a clear but discontinuous row. Side ditch to NW of agger was shallow with a fill of blackish clay silt. Outside the ditch was a bank formed of orange brown hard clay. Probably a roadside embankment intended to raise main carriageway above flooding risk. Route probably founded by Romans, but then reused by medieval route. turnpike & present A56. Finds were all post med - 2 sherds of pottery & metal objects | Roman | 346130 | 371650 |
| A7 | 188838 | NDHA | Roman Road Chester to Wilderspool (Margary Route 701) | Possible site of a Roman road. Agger - The roman name for embankment built to allow drainage of the road surface. Could be simple earth structures or be many different layers of stone. Material for the agger was usually dug for a ditch on either side of the road. | Roman | 347350 | 373200 |
| A8 | 188839 | NDHA | Roman Road Chester to Wilderspool (Margary Route 701) | Section of potential Roman road. Agger – The roman name for embankment built to allow drainage of the road surface. Could be simple earth structures or be many different layers of stone. Material for the agger was usually dug for a ditch on either side of the road. | Roman | 347550 | 373600 |
| A9 | 2336 | NDHA | Unnamed Findspot in Dunham- on-the-Hill | One unciae lead weight 26.64 gm. Diameter c. 2.45 cm, depth 0.67 cm. Unciae is a roman unit of measuring weight. It is one 12th of the libra (the roman pound) and is roughly equivalent to one ounce. | Roman | 347310 | 372430 |
| A10 | 997 | NDHA | Roman finds from Alvanley | In 1886 in a field near Peck Mill, between Alvanley & Dunhan-on-the- Hill, a fine gold coin of Nero & a jewelled ring were found | Roman | 348260 | 373080 |
| A11 | 1009 | NDHA | Roman Coin in Helsby | A Roman coin is reported to have been found in the vicinity of the cricket ground at Helsby. | Roman | 348620 | 375340 |
| A12 | 35432 | NDHA | Cross Shaft in St Mary's Church | In 1982, a trench was dug around the exterior of the foundations of St Mary's Church. It was observed by Brown and Gallagher after partial back- filling. They recovered part of an Anglo-Viking cross shaft 0.40m wide and 0.30m high, and | Early medieval | 344150 | 374540 |



| Asset ID | Source ID | Status | Name | Description | Period | Easting | Northing |
|-------------|-----------|--------|---|--|------------------|---------|----------|
| | | | | decorated on all four faces. Work is crude and abraded. One face shows parts of three figures, perhaps representing the arrest of Christ, the other has part of a figure and the head of an animal. One edge shows the Staffordshire Knot decoration and the other has the inscription GOD HELPE. The placing of the inscription and use of Roman lettering is exceptional. | | | |
| A13 | 5217 | NDHA | Medieval Silver Penny from Bridge Trafford | Medieval Silver Penny Alexander III of Scotland, silver penny found by metal detector. The voided long cross denotes Alexander III's first coinage. It dates from circa 1250 AD to 1280 AD. | Medieval | 345800 | 371500 |
| A14 | 2568 | NDHA | Unnamed findspot in Dunham-on- the-hill Parish | Clipped and worn Edward III silver half groat, issued between 1351 and 1377 | Medieval | 346500 | 372010 |
| A15 | 1991/5 | NDHA | Unnamed findspot in Dunham-on-the-Hill | Bronze foot of cauldron, C15th-C16th | Medieval | 347030 | 372500 |
| A16 | 998/1 | NDHA | Peck Mill, Alvanley | There is a watermill site on Peck Mill Brook. A mill was first mentioned here in 1208-1226 and later in 1552. Bryant's map of Cheshire two mills here in 1831. | Medieval | 348300 | 373100 |
| A17 | 1997/0/1 | NDHA | Medieval Moat in Thornton-Le- Moors | Site of moat. There was a moat on the east side of the village, c.200 yds east of the parish church. The moat is now filled up, but there are indications of its site at the side of the highway and in the farmyard adjoining. It is probable that it once contained the mansion of the knightly family of Le Roter (1). Traces of the moat existed in the form of a pond to the NW of the farm buildings. By 1958 this pond had been filled in and the ground levelled. No trace of moat by 1964 | Medieval | 344300 | 374620 |
| A18 | 2036/1 | NDHA | Dunham-on-the-Hill Watermill | Site of Elizabethan mill at Dunham-on-the-Hill. Location unknown. Watermills are known to have been used in Britain during Roman and Saxon times. In the Domesday survey of 1086, around 6,000 mills were recorded. In medieval times each manor that the right to have its own mill with the peasants forced to use it. A tax was payable on all corn ground and there were fines for those to tried to mill corn in their own homes using hand querns. | Post medieval | 347080 | 372770 |
| A19 | 1991/6/0 | NDHA | Wesleyan Methodist Chapel, Dunham on the Hill | Wesleyan Methodist Chapel built of brown brick on sandstone plinth, with round arched windows and later frames. Dated 1843 | Post medieval | 347290 | 372890 |
| A20 | 1993/2/0 | NDHA | Primitive Methodist Chapel, Ince Lane | Small three-bay brick Primitive Methodist Chapel dated 1845 adjoining earlier barn (1). Destroyed (2). | Post medieval | 345810 | 375470 |
| A21 | 15654 | NDHA | Post Medieval lead weight from Ellesmere Port area | post medieval cast lead weight | Post medieval | 344100 | 374500 |
| A22 | 15655 | NDHA | Shoe Buckle fragment from Ince | 18th century shoe buckle | Post medieval | 345110 | 375780 |



| Asset ID | Source ID | Status | Name | Description | Period | Easting | Northing |
|-------------|-----------|--------|--|---|------------------|---------|----------|
| A23 | 15656 | NDHA | 17th century Silver sixpence from Elton | Silver Sixpence of William III | Post medieval | 345250 | 375700 |
| A24 | 1002/1 | NDHA | Horn's Mill | Hornsmill was a combined water and windmill. It was probably 18th century in date. The watermill was 3 storeys high and built of brick. The windmill tower was largely demolished around 1944. The mill was recorded as largely derelict in 1966 amd in 1976 the watermill had been reduced to a rectangular one storey, brick- built building with the windows blocked up and converted into a private garage. The remains of the windmill form the rear wall of the building. | Post medieval | 348160 | 374140 |
| A25 | 15354/0 | NDHA | The West Cheshire Railway (WCR) Helsby to Northwich Line | A railway line between Helsby and Mouldsworth was opened in 1869 as part of the West Cheshire Railway's line from Helsby and Alvanley to Northwich. The West Cheshire Railway (WCR) formed part of the Cheshire Lines Committee in 1865, prior to the opening of the line. The Helsby & Alvanley and Helsby Goods line opened to goods in 1869 and passengers in 1870. It closed to passengers in 1875. It had intermittent use as a passenger line from 1936 before its final closure for both goods and passengers in 1964. | Post medieval | 349490 | 373160 |
| A26 | 2527/1/0 | NDHA | Birkenhead and Chester Line (L & NWR/GWR) | The Birkenhead and Chester railway incorporates two separate lines; the first ran from Birkenhead south to Chester and was incorporated in 1838 by Act of Parliament, opening in 1840 initially to an ad hoc station at Brook Lodge and later to Chester General Station. The second line ran from Chester north east to Warrington, originally owned by the Birkenhead, Lancashire and Cheshire Junction Railway, it opened in 1850. | Post medieval | 347330 | 376690 |
| A27 | 15354/2/1 | NDHA | West Cheshire Railway (WCR) - Helsby and Alvanley Station Goods Yard | A goods yard and engine shed associated with Helsby and Alvanley Station built by the Cheshire Lines Committee | Post medieval | 348560 | 374870 |
| A28 | 14960 | NDHA | Helsby Quarry | A former sandstone quarry once served by a tramway via a tunnel and active in the mid nineteenth century until around 1945. | Post medieval | 349010 | 374890 |
| A29 | 15209 | NDHA | Bear Hole, Helsby | A cave with evidence of 19th century mining. The name of the cave relates to the local folk-law that a bear was kept in the cave in the 18th century. | Post medieval | 348860 | 374600 |
| A30 | 15585 | NDHA | Hillside House and Garden, Helsby | Hillside has its origins in the late-Georgian period. It is first mentioned and shown on maps around the time that Helsby Quarry began operations, to which it has been linked as the potential Quarry Managers cottage. A sandstone '2 up 2 down' was extended further in sandstone to create a larger house. The house was extended in phases throughout the 19th Century and became an important residence in the village. | Post medieval | 348880 | 374830 |



| Asset ID | Source ID | Status | Name | Description | Period | Easting | Northing |
|-------------|---|--------|-------------------------------------|--|------------------|---------|----------|
| A31 | 998/2 | NDHA | Site of Peck Mill, Alvanley | Mill shown on Bryant's map of Cheshire of 1831. Historic reords of a mill in Alvanley first mentioned first mentioned in 1208-1226 and later in 1552 | Post medieval | 348110 | 373370 |
| A32 | J469744 (Parks and Gardens UK) | NDHA | Dickson Nurseries | This is a nursery founded by Alexander Dickson in 1836. The firm have been pioneers in rose breeding. Current Use: plant nursery | Post medieval | 346900 | 374400 |
| A33 | Tithe map | NDHA | Brick Kiln Common | Field name recorded by the tithe apportionment as 'brick kiln common', pond shown within plot on tithe map and OS. Landowner - Harry Barnston Roger Esq., Occupier - William Wright. Hapsford tithe map and approtionement, 1838. A William Wright is recorded in the 1841 census, with his occupation listed as farmer. This suggests that the field may have been used for a small clamp kiln producing brick for use on the farm and locally rather than a more commercial enterprise. | Post medieval | 346157 | 373704 |
| A34 | 2512/1 | NDHA | BICC Cables Building | Early 20th century Industrial Site | Modern | 348410 | 374620 |
| A35 | 4142/0/0 | NDHA | Searchlight Batteries for Liverpool | A number of Anti-Aircraft searchlight batteries that covered a large area of Cheshire. They were a part of the layout of searchlight batteries for Liverpool. Searchlight battery at Thornton-le-Moors. Manned by 352 Company of 38 (The King's Regiment) AA Battalion RE. It was part of the Liverpool defences and is part of a much larger distribution that covered large areas of Cheshire | Modern | 343930 | 374500 |
| A36 | 4144 | NDHA | Anti Aircraft Battery at Ince | Heavy Anti Aircraft Battery first documented in February 1940. The last reference was in June 1942. In 1942 it had two guns, but no radar. In January 1946 it became an 'Off' Site in the Nucleus Force (Batteries that were intended to be the core of a Cold War Re-armament), and therefore was one of the gun sites kept in an Un-Gunned state for the cold war. 'Off' Sites could quickly be re-armed in the event of conflict, with the guns normally being stored in warehouses to reduce maintenance costs. Anti aircraft batteries are sites where guns are placed with the purpose of shooting down enemy aircraft. They could contain large calibre guns such as modified artillery cannons (Heavy anti aircraft sites), or small calibre guns such as machine guns (Light anti-aircraft sites), or a combination of both. These sites often survive as earthworks and in some cases the concrete structure of the heavy sites are well preserved | Modern | 345280 | 376000 |
| A37 | 4217 | NDHA | ROF Dunham on the Hill | A Second World War dispersed ammunition storage area. A complex of c.30 steel framed magazines with brick walls and concrete roofs. Approximately half of these buildings are surrounded by a large earth bank, which would have directed the force of any explosion upwards should a mishap occur. The | Modern | 346260 | 373920 |



| Asset ID | Source ID | Status | Name | Description | Period | Easting | Northing |
|-------------|-----------|--------|-------------------|---|--------|---------|----------|
| 10 | | | | magazines were served by standard gauge railway lines which passed through | | | |
| | | | | the buildings to facilitate loading and unloading. The intervening hedgerows | | | |
| | | | | of the pre-existing field system were retained to break up the pattern of the | | | |
| | | | | facility from the air. Aerial photograph from the late 1940s record the facility | | | |
| | | | | reasonably clearly (see 4). It is clear from these photographs that only | | | |
| | | | | approximately half of these buildings were surrounded by earthworks. Typically | | | |
| | | | | the magazine is surrounded on three sides by a large U shaped bank. Adjacent | | | |
| | | | | to the open end of the bank, and parallel to the railway track running through | | | |
| | | | | the building is a linear bank. These banks are of varying lengths and often | | | |
| | | | | extend well beyond the magazine building. The railway line serving the site | | | |
| | | | | adjoins the (former) Birkenhead line just to the north of Dunham on the Hill. A | | | |
| | | | | small complex of buildings adjacent to the site (on Common Lane) is probably | | | |
| | | | | the accommodation for the site. Adjacent to the accommodation and the | | | |
| | | | | railway line is a large amount of either small structures or material laid out in | | | |
| | | | | regular rows. It's not clear what these may be. Recent LIDAR surveys (see 5) | | | |
| | | | | and aerial photography (see 6) show that the majority of these buildings | | | |
| | | | | survive, though in a few instances the surrounding earthworks have been | | | |
| | | | | removed. Although the railway tracks have been removed, their course survives | | | |
| | | | | as earthworks (see 5) and, in some areas, soil marks (see 6). Some of the | | | |
| | | | | accommodation area's hardstanding also survives, as may one building. | | | |
| | | | | The former Ministry of Agriculture, Food and Fisheries Buffer Depot or | | | |
| | | | | foodstore at Dunham-on-the-Hill lay with Home Defence Region 10 and was | | | |
| | | | | allocated depot number 344E. The depot is situated on the northern side of | | | |
| | | | | the railway line between Chester and Helsby, 9km northeast of Chester and | | | |
| | | | | close to the former Dunham Hill station. Road access to the depot was off Hob | | | |
| | | | | Lane, a minor road between Dunham-on-the-Hill and Thornton-le-Moors, a | | | |
| | | | | short distance from the main road between Chester and Helsby. To the | | | |
| A38 | 1085336 | NDHA | Buffer Depot 344E | northwest of the depot are the scattered magazines of the former Dunham- | Modern | 346700 | 372700 |
| | (HERR) | | | on-the-Hill munitions storage area which closed in 1959. The depot occupied | | | 0.2.00 |
| | | | | a roughly rectangular site delimited by a low post and wire fence with concrete | | | |
| | | | | posts. The depot building is a three aisled structure, each aisle covered by a | | | |
| | | | | pitched roof clad in asbestos sheeting with a clerestory, which is carried down | | | |
| | | | | to eaves height on the gable walls. The walls are of brick laid in English garden | | | |
| | | | | wall bond. Access to the storage bays was through one of five sliding doors | | | |
| | | | | ranged along the northern side of the buildings. The reveals of the openings | | | |
| | | | | are protected by bull nosed grey engineering bricks. Guttering and downpipes | | | |



| Asset ID | Source ID | Status | Name | Description | Period | Easting | Northing |
|-------------|--|--------|--|---|------------------|---------|----------|
| | | | | are of asbestos, a number of the downpipes are protected by metal plates to act as a barrier to climbing vermin. No internal inspection of the building was carried out. In the southern part of the depot is an emergency water supply pool and a small brick building of unknown function. | | | |
| A39 | 4225/0/2 | NDHA | Bombing Decoy Site at Ince | Second World War bombing decoy. Bombing decoys were often made of electrical lights and fires of various sizes that were designed to try and deceive enemy aircraft into thinking that they were above a major target such as an industrial city. They therefore acted as passive defence for vulnerable areas | Modern | 347440 | 376600 |
| A40 | CH_CHWA 06 (Historic milestone society) | NDHA | Milestone, opposite Dunham Lane | Milestone, opposite Dunham Lane, A56, E side, on the verge. Cast iron post, Cast iron CCC1898 design, erected by the County Council, 19th century. Inscription reads: // CHESTER / 6 MILES //HELSBY / 2 MILES / FRODSHAM / 5 / WARRINGTON 14 //CHESHIRE / 1898 / COUNTY COUNCIL //. Milestone Society National ID: CH_CHWA06. Last record: 2003. (See www.milestonesociety.co.uk) | Post medieval | 347040 | 372730 |
| A41 | Historic maps | NDHA | Township boundary (Elton/ Hapsford) | The boundary between the townships of Hapsford and Elton follows field boundaries on the tithe map, one of which had been removed by later mapping, the remainder is extant in part. | Post medieval | 346019 | 373938 |
| A42 | Historic maps | NDHA | Rake Lane/ township boundary | Road shown on historic maps and demarks the boundary between the townships of Dunham-on-the-Hill and Hapsford | Post medieval | 346236 | 373640 |
| LLB1 | DCH10290 | NDHA | Old Station, Off Chester Road | 1869 (Victorian), Former Helsby and Alvanley Station | Post medieval | 348640 | 374720 |
| LLB2 | DCH10291 | NDHA | 115 -119 Robinhood Lane | Also known as 'Spite Houses'. Apparently built to 3 storeys to block the view of neighbour to S over the Mersey estuary. | Post medieval | 348800 | 375010 |
| LLB3 | DCH10292 | NDHA | Hill Cliff Cottage, The Rock | 1860 on tablet over the doorway. | Post medieval | 348770 | 374690 |
| LLB4 | DCH10307 | NDHA | Undercliffe, Chester Road | 1770, ALTERED 1879 House with barn behind | Post medieval | 348810 | 375280 |
| LLB5 | DCH10308 | NDHA | 138 Chester Road | 1800, Long House(?) | Post medieval | 348810 | 375300 |
| LLB6 | DCH9857 | NDHA | Peck Mill Farm, Towers Lane | Brick and sandstone building. Sandstone part with marks from waterwheel. Buttressed gable. Door 4 foot from ground. Upper floor has long hatch with hoist above. Some timber machinery remains in upper storey small bay. Peck mill - asmall ruinous building of 2 storeys, brick and slated. The interior is completely stripped and the wheel gone, out on the external gable wall there is the usual stonework in the wheel position and this is heavily scored by the | Post medieval | 348280 | 373090 |



| Asset ID | Source ID | Status | Name | Description | Period | Easting | Northing |
|-------------|-----------|--------|--|---|--------|---------|----------|
| | | | | misaligned wheel before removal. The diameter would be about 12' 0" and probably a breast wheel. The pond is now dry and the dam broke down for a farm road. The mill building is probably at 3429 37308 | | | |
| LLB7 | DCH10804 | NDHA | Telephone Kiosk, Chester Road, Helsby | At back of pavement outside No. 201 | Modern | 348790 | 375420 |
| LLB8 | DCH9505 | NDHA | Thornton Aero Engine Research Laboratory, Building 38, Off Pool Lane, Ince | Built for research into diesels, oils and greases. The architect also designed Liverpool Airport Control Tower. The central of three buildings, the others acting as subsidiary "pavilions". Central tower with grand staircase in a style commonly seen on other transport related subjects such as ocean liners and airport control towers. Typical applied decoration (aviation subjects). Horizontally proportioned metal frame windows and long sweeping handrails. An International style with its origins in the "Bauhaus" School of Architecture of 1920s Germany. | Modern | 344840 | 375780 |
| LLB9 | DCH9541 | NDHA | Thornton BPM (Laboratory Building No27), Pool Lane, Ince | Built to house the work of Dutch escapees from occupied Holland, who continued their work here as "Bataafe Petroleum Maatschappij". Original purpose was to derive chemicals from petroleum (DDT Teepol). Architecturally a subsidiary "pavilion" to the main Aero Engine Laboratory. A short square central tower, less dramatic than buildings 38 and 50 (LL43 and LL44), possibly reflecting the haste with which it was constructed under wartime conditions. Some relief sculpture of an aeronautical theme with distinctive Art Deco style external light fittings. A modest interpretation of the International style that has its origins in the "Bauhaus" School of Architecture of 1920s Germany. | Modern | 344770 | 375850 |

End of Report