

GLASFRYN ROAD, ST DAVIDS, PEMBROKESHIRE TRIAL TRENCH EVALUATION 2021

NGR SM 75790 25360



Evaluation trenches; looking south



DYFED ARCHAEOLOGICAL TRUST

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PROJECT RECORD NO. 2021-76

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**GLASFRYN ROAD, ST DAVID'S,
PEMBROKESHIRE
TRIAL TRENCH EVALUATION 2021**

By:

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GLASFRYN ROAD, ST DAVID'S, PEMBROKESHIRE

TRIAL TRENCH EVALUATION 2021

Client

Gareth Davies

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**GLASFRYN ROAD, ST DAVID'S, PEMBROKESHIRE:
TRIAL TRENCH EVALUATION 2021**

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EXECUTIVE SUMMARY

DAT Archaeological Services were commissioned to undertake trial trench evaluation ahead of a proposed development at land east of Glasfryn Road, St David's, Pembrokeshire, (centred on NGR SM 75790 25360). Two trenches, machine excavated under archaeological supervision, revealed a scattering of flint pieces within and around a tree-hole, and modern plough-scars. No features or deposits of archaeological significance were recorded.

CRYNODEB GWEITHREDOL

Comisiynwyd Gwasanaethau Archaeolegol YAD i gynnal gwerthusiad ffosydd prawf cyn datblygiad arfaethedig ar dir i'r dwyrain o Ffordd Glasfryn, Tyddewi, Sir Benfro, (yn ganolog ar NGR SM 75790 25360). Datgelodd dwy ffos, a gloddiwyd â pheiriant dan oruchwyliaeth archeolegol, yn dangos gwasgariad o ddarnau fflint o fewn ac o amgylch twll coeden, a chreithiau aradr modern. Ni chofnodwyd unrhyw nodweddion na dyddodion o arwyddocâd archeolegol.

**LAND EAST OF GLASFRYN ROAD, ST DAVID'S, PEMBROKESHIRE:
TRIAL TRENCH EVALUATION 2021**

1.1 INTRODUCTION

1.1 Project Commission

- 1.1.1 DAT Archaeological Services were commissioned by Gareth Davies to undertake an archaeological trial trench evaluation ahead of a proposed development for new residential housing on land east of Glasfryn Road, St David's, Pembrokeshire (NGR SM 75790 25360) (Figures 1 and 2).
- 1.1.2 The proposed development area lies within an agricultural pasture field located to the east of Glasfryn Road and covers approximately 1.2ha (Figure 3).
- 1.1.3 The field had been subjected to a geophysical survey in August 2019 (Figures 2 and 3). The results of the survey suggested there was potential for remains of a former barn or cottage (Feature A) to survive within the area, aligned on the same orientation as a former field boundary suggesting some relationship between them.
- 1.1.4 According to the 1st edition OS map the development field was once amongst 19 standing stones: the nearest being 82m west of the evaluation trenches and the furthest 625m to the east. It is difficult to ascertain how many of these standing stones were prehistoric and how many erected in the modern era as cattle scratching posts, but it would be feasible to say that the majority were prehistoric, considering the concentration of prehistoric features that exists on the St David's peninsula. None of these stones appear on the HER database (Figure 3).
- 1.1.5 The aim of the evaluation was to provide information on the character and significance of any below ground archaeological remains that may have been present within the development area as indicated by the geophysical survey. The evaluation was requested by the archaeological advisors to the planning authority, Dyfed Archaeological Trust – Development Management (DAT-DM) in order to assess the likely impact of the proposed development upon potential archaeological remains.
- 1.1.6 A Written Scheme of Investigation (WSI) for the trial trench evaluation was produced by DAT Archaeological Services (Appendix I) and was approved by DAT-DM within their role as advisors to the planning authority prior to the commencement of works.
- 1.1.7 All works undertaken were in accordance with the Chartered Institute for Archaeologists (CIfA) Standard and Guidance for Archaeological Field Evaluation (S&G AFE) (CIfA 2014). Dyfed Archaeological Trust is a Registered Organization with CIfA.

1.2 Scope of Project

1.2.1 A WSI for trial trenching was prepared by DAT Archaeological Services prior to the commencement of works (Appendix I). This outlined the methodology by which the trial trenching was undertaken.

1.2.2 The purpose of field evaluation as laid down in the CIfA S&G AFE is:

to gain information about the archaeological resource within a given area or site (including its presence or absence, character, extent, date, integrity, state of preservation and quality), in order to make an assessment of its merit in the appropriate context, leading to one or more of the following:

- The formulation of a strategy to ensure the recording, preservation or management of the resource
- The formulation of a strategy to mitigate a threat to the archaeological resource
- The formulation of a proposal for further archaeological investigation within a programme of research

1.2.3 The overall scheme of work was summarized as follows:

The implementation of a scheme of archaeological evaluation and watching brief within the area proposed for residential development to the east of Glasfryn Road, St Davids, Pembrokeshire. The archaeological field evaluation will determine, as far as is reasonably possible, the nature of the archaeological resource within this specified area using appropriate methods and practices. These will satisfy the stated aims on the project and comply with the code of conduct and other relevant regulations of CIfA. A report shall be prepared on the results of the evaluation and an archive created of all finds, records, photographs and plans created by this mitigation strategy. Further mitigation is possible where significant remains are identified; the scope of which would be determined following this stage of work.

1.3 Report Outline

This report describes the location of the study area, reviews the historical and archaeological background, and provides a summary and discussion of the trial trenching and its results.

1.4 Abbreviations

1.4.1 All sites recorded on the Regional Historic Environment Record¹ (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Dyfed Archaeological Trust Development Management – DAT-DM; Written Scheme of Investigation – WSI; National Monument Record – NMR, Royal Commission on the Ancient and Historical Monuments of Wales – RCAHMW.

¹ Held and managed by Dyfed Archaeological Trust, Corner House, Carmarthen Street, Llandeilo SA19 6AE.

1.5 Illustrations

1.5.1 Printed map extracts are not necessarily produced to their original scale.

1.6 Timeline

1.6.1 The following timeline (Table 1) is used within this report to give date ranges for the various archaeological periods that may be mentioned within the text.

Table 1: Archaeological and Historical Timeline for Wales.

Period	Approximate date	
Palaeolithic –	c.450,000 – 10,000 BC	Prehistoric
Mesolithic –	c. 10,000 – 4400 BC	
Neolithic –	c.4400 – 2300 BC	
Bronze Age –	c.2300 – 700 BC	
Iron Age –	c.700 BC – AD 43	
Roman (Romano-British) Period –	AD 43 – c. AD 410	Historic
Post-Roman / Early Medieval Period –	c. AD 410 – AD 1086	
Medieval Period –	1086 – 1536	
Post-Medieval Period ² –	1536 – 1750	
Industrial Period –	1750 – 1899	
Modern –	20 th century onwards	

² The post-medieval and industrial periods are combined as the post-medieval period on the Regional Historic Environment Record as held by Dyfed Archaeological Trust



Figure 1: Location of St David's within St David's Peninsula (development site in red).

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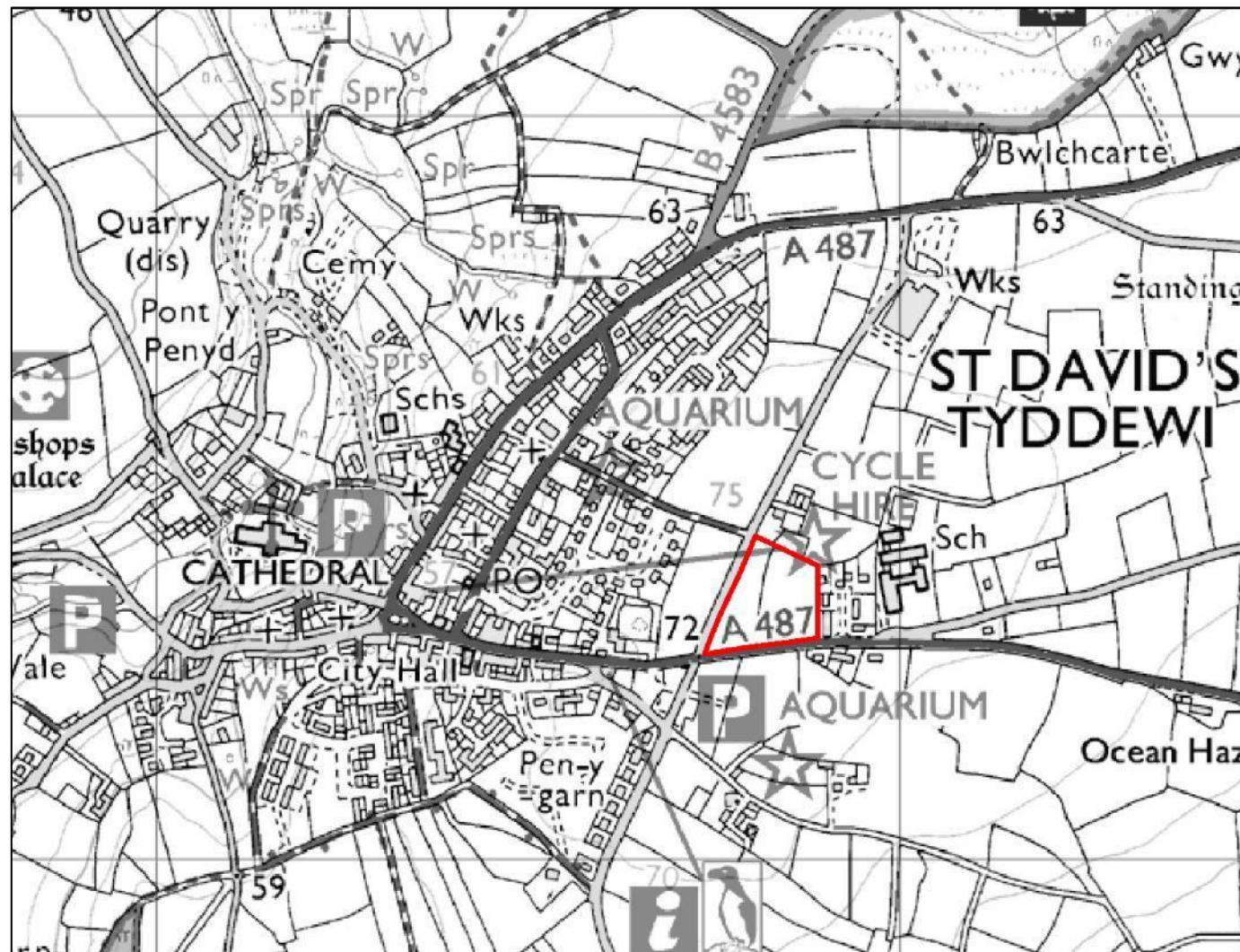


Figure 2: Map extract showing development area (outlined in red)

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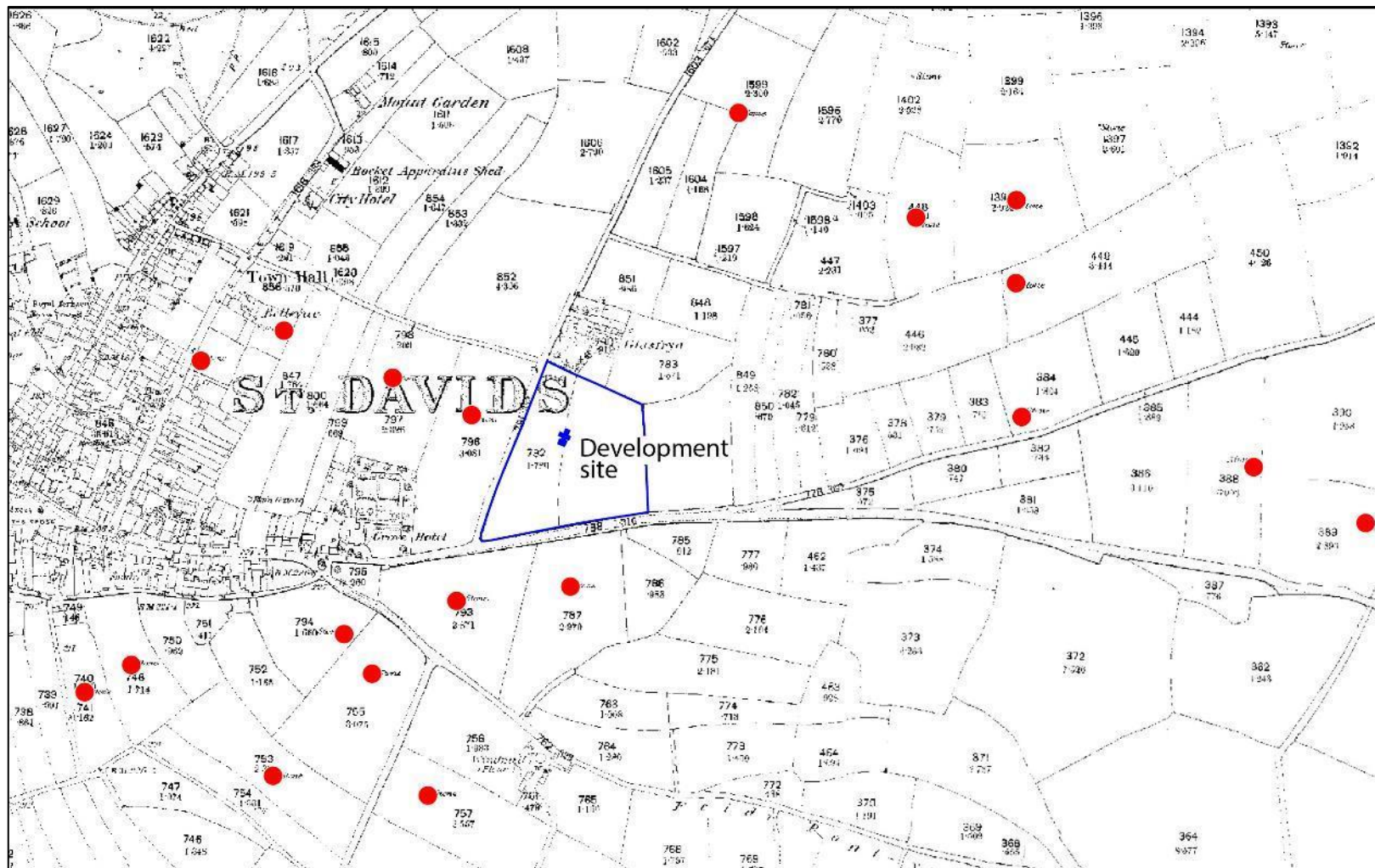


Figure 3: Location of standing stones (red) shown on 1st edition Ordnance Survey map published in 1889.
Development site outlined in blue.

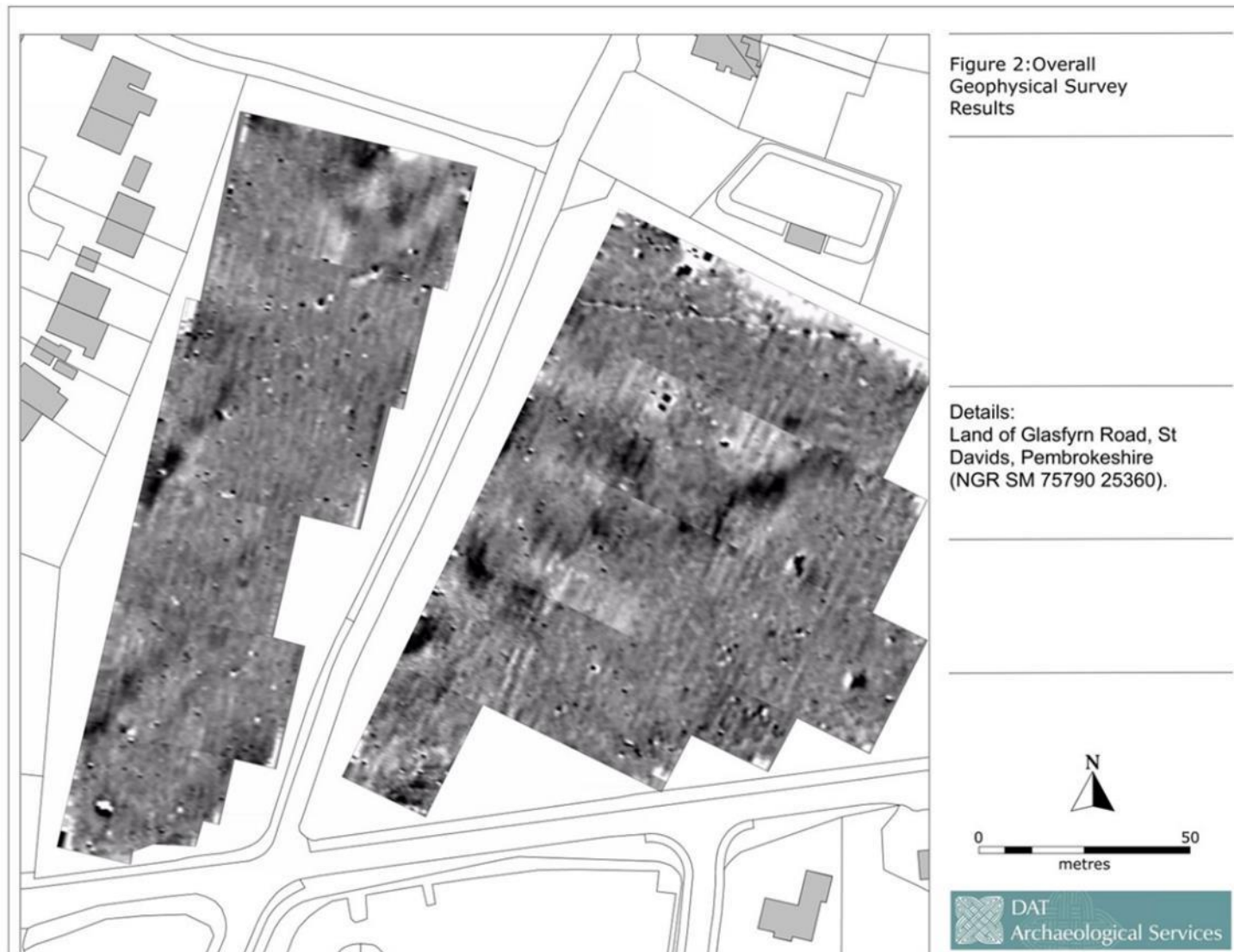


Figure 4: Results of geophysical survey undertaken in 2019; the striations running roughly NE-SW are plough scars

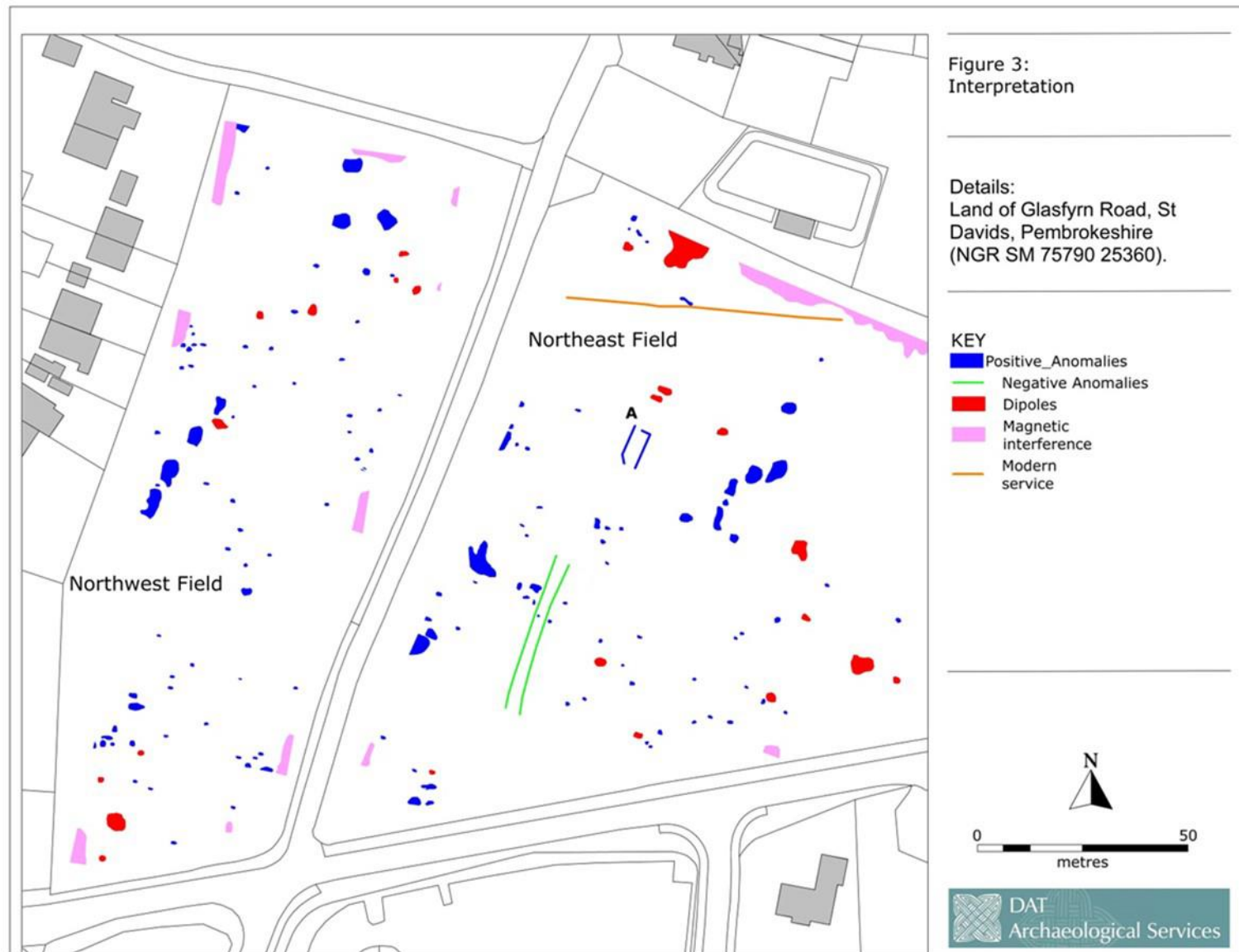


Figure 5: Geophysical survey interpretation.

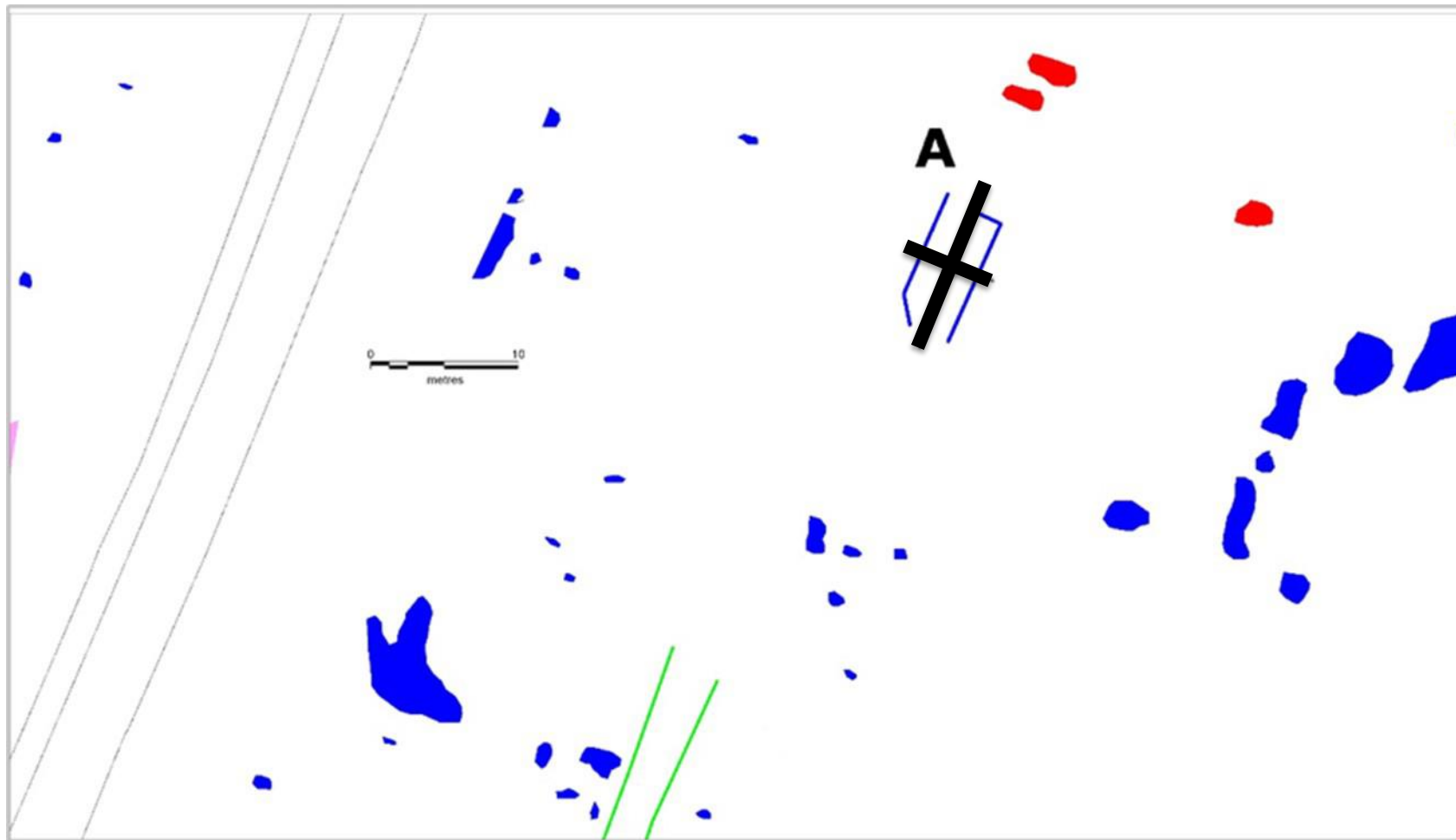


Figure 6: Location of evaluation trenches in relation to feature A

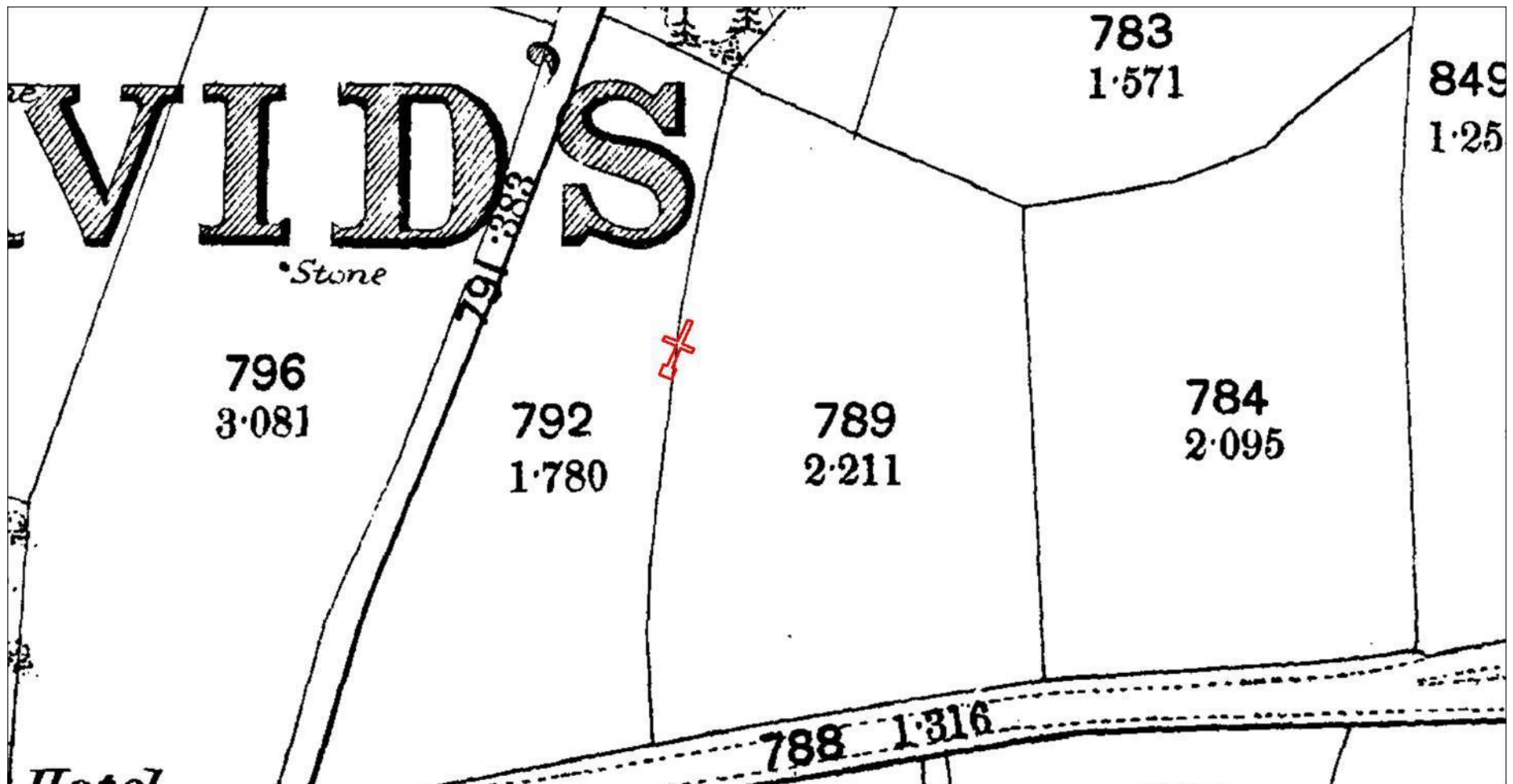


Figure 7: Extract of 1st edition OS (1889) map showing evaluation trenches overlying field boundary. the boundary can also be seen in a 1950s aerial photograph (Figure 8).



Figure 8: Aerial photo of St David's taken in 1950 showing field boundary discussed in results and shown on historic mapping (Figure 7).

2. THE SITE

2.1 Site Location (Figures 1 & 2; Photo 1)

- 2.1.1 The proposed residential development site is located in the city of St David's in a 1.2ha pasture field, east of Glasfryn Road (roughly centred on NGR SM 75790 25360; Figures 1 & 2).
- 2.1.2 The A487 road runs along the southern boundary of the field, and a housing development is situated to the east; to the north lies a reservoir and Glasfryn Farm buildings and some fields. The whole area is at the eastern extremity of the city of St Davids.
- 2.1.3 The bedrock geology in this area is igneous tuff of the Caerbwdy Group, formed approximately 541 to 635 million years ago in the Ediacaran Period (BGS 2021).



Photo 1: View south across proposed development area.

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.1 Palaeolithic archaeology is not found in situ in this part of Pembrokeshire because the last icesheets removed all evidence of human activity in their path. In contrast, there is a relatively high quantity of evidence for human habitation during the Mesolithic era in the vicinity of St David's, compared to the rest of the county. The evidence consists almost solely of flint tools, usually in quantities of less than ten per findspot, but at one site, (Penpant Farm, 3km east of St David's) more than twenty thousand lithic artefacts were discovered. These Mesolithic sites have, thus far, mainly been found near the coast, but inland sites are being discovered (such as at Llangwm in south Pembrokeshire).
- 3.2 There are many known Neolithic sites in this part of Pembrokeshire, again in relatively high abundance. The main site-types recorded are chambered tombs and stone axe findspots, but there is also a stone circle, an enclosure and a settlement near to St David's. Evidence for Bronze Age activity is more than twice as prolific, mainly in the form of funerary mounds and standing stones. Remains of Iron Age date are less frequent, as is the case for much of Wales, and consists largely of defended enclosures or promontory forts, such as that at St David's Head to the west. Neolithic, Bronze Age and Iron Age sites on the St David's peninsula have a quite evenly scattered distribution.
- 3.3 Although there are about twenty recorded Roman sites on the St David's peninsula, the majority were discovered many years ago and have uncertain provenance, position and/or date. It has yet to be shown that Roman occupation extended this far westwards, though it is considered very likely that it did.
- 3.4 St David's was established at least as early as the sixth century AD and from then until now there is record of continuous settlement. It is said that two pilgrimages to St David's were considered, in the medieval period, to equal one to Rome, and the holy place and its environs are likely to have been very busy. There is a higher concentration of known early medieval sites here than in other parts of the county. It is believed that the area around St David's was important for busy maritime connections with Ireland, and there were also links with Anglo-Saxon and Viking communities. Viking influence is thought to have been mostly in the form of coastal raids, but there is a high number of Scandinavian place-name elements, suggesting possible settled occupation. There is a strong cluster of such names around St Davids Head (James 2016).

4. TRIAL TRENCH EVALUATION METHODOLOGY

4.1 Fieldwork Methodology

- 4.1.1 To ascertain the significance and state of preservation of potential archaeological features within the development area, two evaluation trenches were planned: forming a cross. The trenches were positioned to target the discrete anomalies identified by the geophysical survey (Figures 4, 5 and 6).
- 4.1.2 A tracked 360° mechanical excavator fitted with a flat bladed grading bucket was used to open the trenches under archaeological supervision. All non-archaeologically significant overburden was removed, and the trench was excavated down onto archaeological levels or undisturbed natural ground, whichever was reached first.
- 4.1.3 Following machine excavation, the trenches were appropriately cleaned to best determine the presence or absence of archaeological remains.
- 4.1.4 All deposits were recorded in accordance with DAT Archaeological Services Recording System. Trench plans and sections were recorded by means of measured sketches and GPS survey. A photographic record was maintained using digital cameras.
- 4.1.5 A very small number of pottery artefacts was identified within topsoil deposits and readily identified as late post-medieval fabrics of limited archaeological interest. Once noted, these artefacts remained on site.
- 4.1.6 No deposits suitable for environmental sampling were encountered during the archaeological fieldwork.

4.2 Post-Fieldwork Reporting and Archiving

- 4.2.1 The WSI stated that an archive would be prepared if it would meet the requirements of the Dyfed Archaeological Trust archive retention policy (2018). In this case, due to the negative archaeological results, the project did not meet the requirements and as such this report forms the archive for the project.
- 4.2.2 The results of the fieldwork have been assessed in local, regional and wider contexts. The report includes a desk-based research element to ensure that the site is placed within its wider archaeological context.

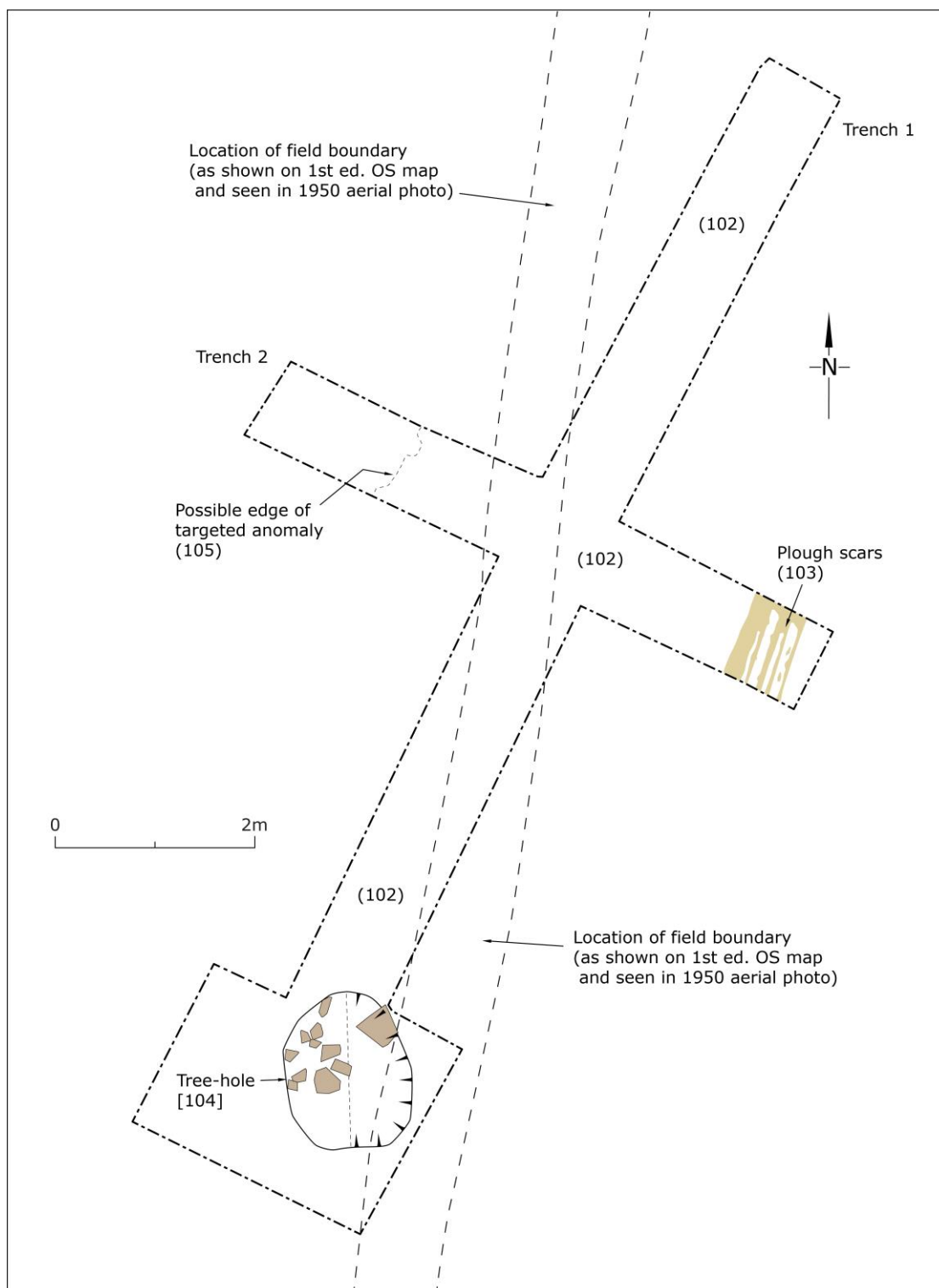


Figure 9: Plan of evaluation trenches and features.

5. RESULTS (Figures 5, 6 and 9)

5.1 Introduction

- 5.1.1 The excavation was conducted on the 11th and 12th of October 2021 by Hubert Wilson (archaeologist) and Tom Jamieson (archaeologist).
- 5.1.2 Two trenches (forming a cross) were positioned to target discrete anomalies detected by the 2019 geophysical survey:
- **Trench 1:** 12.7m x up to 2.7m trench targeted two linear anomalies located at each end of the trench.
 - **Trench 2:** 6.5m x 1m trench targeted two linear anomalies located within separate halves of the trench.
- 5.1.3 All trenches were excavated to levels of exposed superficial geology. These comprised soft, grey weathered tuff and orange-brown, clay-silt (102).

5.2 Trench 1 (Figure 9, Photos 2 - 7)

- 5.2.1 Trench 1 measured 12.7m by 1m and was aligned NNE-SSW; the final 2m of trench at the southern end was widened to 2.7m in order to better characterize a stone-filled deposit (Photo 2). The trench targeted (at either end) two small, linear anomalies seen in the 2019 geophysical survey. It had been suggested that they could indicate the former position of a cottage or barn.
- 5.2.2 The superficial geological deposit was a weathered tuff, which had the appearance of soft, grey, sandstone with a thin mineralization layer above – a mottled, orange/brown, silty-clay (102). Directly above this deposit stood between 0.28m – 0.30m of topsoil: a dark brown, slightly sandy, clay-silt (101). These deposits were consistent throughout the trenches.
- 5.2.3 The short linear anomaly at the north end of the trench was identified as a geological feature (Photo 3).
- 5.2.4 During cleaning at the southern end of the trench it was noted that some pieces of flint were present at the interface between the topsoil (101) and (102).
- 5.2.5 The short linear anomaly at the southern end of the trench could not be easily characterised, but to the east, part of a possible stone-filled feature was uncovered [104]. To reveal this feature in its entirety the trench width was expanded to 2.7m. This revealed a probable tree-hole, 1.56m long and 1.25m wide (Photo 4). The fill (106) comprised brownish loam (similar to topsoil) containing large sub-angular stones with a small percentage of gravel and, towards the bottom, a small scattering of flint chips (Photos 5 and 6). The tree hole was cut into undisturbed natural ground (102). The feature had a flattish bottom and moderately steep sides.
- 5.2.6 No significant archaeological finds, features or deposits were recorded in Trench 1.



Photo 2: View north along Trench1.



Photo 3: View west of geological band at north end of Trench 1 (0.5m scale)



Photo 4: View SW; tree-hole [104] - in line with removed field boundary (0.5m scale)



Photo 5: View SW of half-sectioned tree-hole [104] (0.5m scale)



Photo 6: Some of the flint chips discovered within and around [104]

5.3 Trench 2 (Figure 9, Photos 7-9)

- 5.3.1 Trench 2 measured 6.5m by 1m, was aligned WNW-ESE and crossed just above the middle of Trench 1 (Photo 7). As with Trench 1 it was positioned to target linear anomalies (Figure 6) conjectured to be the remains of a former cottage or barn.
- 5.3.2 The superficial geological deposit (natural) was an eroded tuff, which had the appearance of grey, weathered sandstone. Above this stood a thin layer of mottled, orange/brown, silty clay (102). Directly above this deposit stood between 0.28m – 0.30m of topsoil (101); a dark brown, slightly sandy, clay-silt.
- 5.3.3 The anomaly targeted in the eastern arm of Trench 2 - initially an amorphous band of soil - became more defined after trowelling, developing into a series of linear bands (4 in total) c. 0.06m – 0.12m wide and 0.03m deep. The fill (103) of these shallow linear gullies was similar to the topsoil (101). These bands were interpreted as plough-scars and can be seen in the geophysical survey as NE-SW striations (Figure 4; Photo 8).
- 5.3.4 The linear anomaly targeted in the western arm of Trench 2 was not positively identified. A darker area of soil, located within the trench where the anomaly ought to be, did not fully resolve into a recognizable outline when trowelled, becoming instead an amorphous patch, similar in character to (105) seen in Trench 1. (Photo 9).
- 5.3.5 No significant archaeological finds, features or deposits were recorded in Trench 2.



Photo 7: View east across Trench 2 after initial clean (0.5m scale)



Photo 8: View north; anomaly seen in geophysical survey in east end of Trench 2, thought to be plough scars (103) (0.5m scale)



Photo 9: View north; of area of slightly darker soil (105) at west end of Trench 2 where geophysical anomaly was presumed to be (0.5m scale)

6. DISCUSSION AND CONCLUSION

- 6.1 Two evaluation trenches were excavated within the proposed development area to levels exposing naturally occurring superficial geological deposits. These deposits appeared consistent throughout the trenches, consisting of a mix of soft, grey weathered tuff and a mottled orangey-brown, silty-clay (103).
- 6.2 Of the four targeted anomalies (revealed during the geophysical survey in 2019) two were positively identified during the evaluation, and two were not.
- 6.3 The evaluation survey, when superimposed over the 1st edition OS map shows tree-hole [104] to be located on the line of a former field boundary (Figures 7 and 9). This boundary is also visible in an aerial photograph taken in 1950 (Figure 8). It is conjectured that when the boundary was removed the tree-hole was backfilled with stone and soil (106) similar to the topsoil. The small scatter of flint chips found within and around the tree-hole, are possibly associated with prehistoric activity in the area, some of which were incorporated with the backfill.
- 6.4 Surprisingly no trace of the former field boundary that once ran through the existing field was recorded in the geophysical survey, but neither was any trace of this boundary recorded in the evaluation trenches, which would be expected, as such features normally leave evidence in the ground. Subsequent ploughing within the field appears to have removed all trace of the field boundary.
- 6.5 The anomaly in the east side of Trench 2 was a set of post-1950s plough scars originating from the use of the field to grow potatoes (according to anecdotal evidence). The scars can be seen in the geophysical survey as parallel lines running NE-SW covering the whole field. They appear darker in places, probably because the natural ground rises, and therefore the plough cuts a little deeper, producing a stronger signal. It is also evident when looking at Figure 10 that the field boundary and the plough-scars are differently aligned.
- 6.6 The evaluation results suggest that the discrete anomalies identified during the geophysical survey are the result of natural variations in the superficial geology, a tree-hole associated with a removed field boundary, and modern plough-scars. There was no evidence that they represented features of archaeological significance.

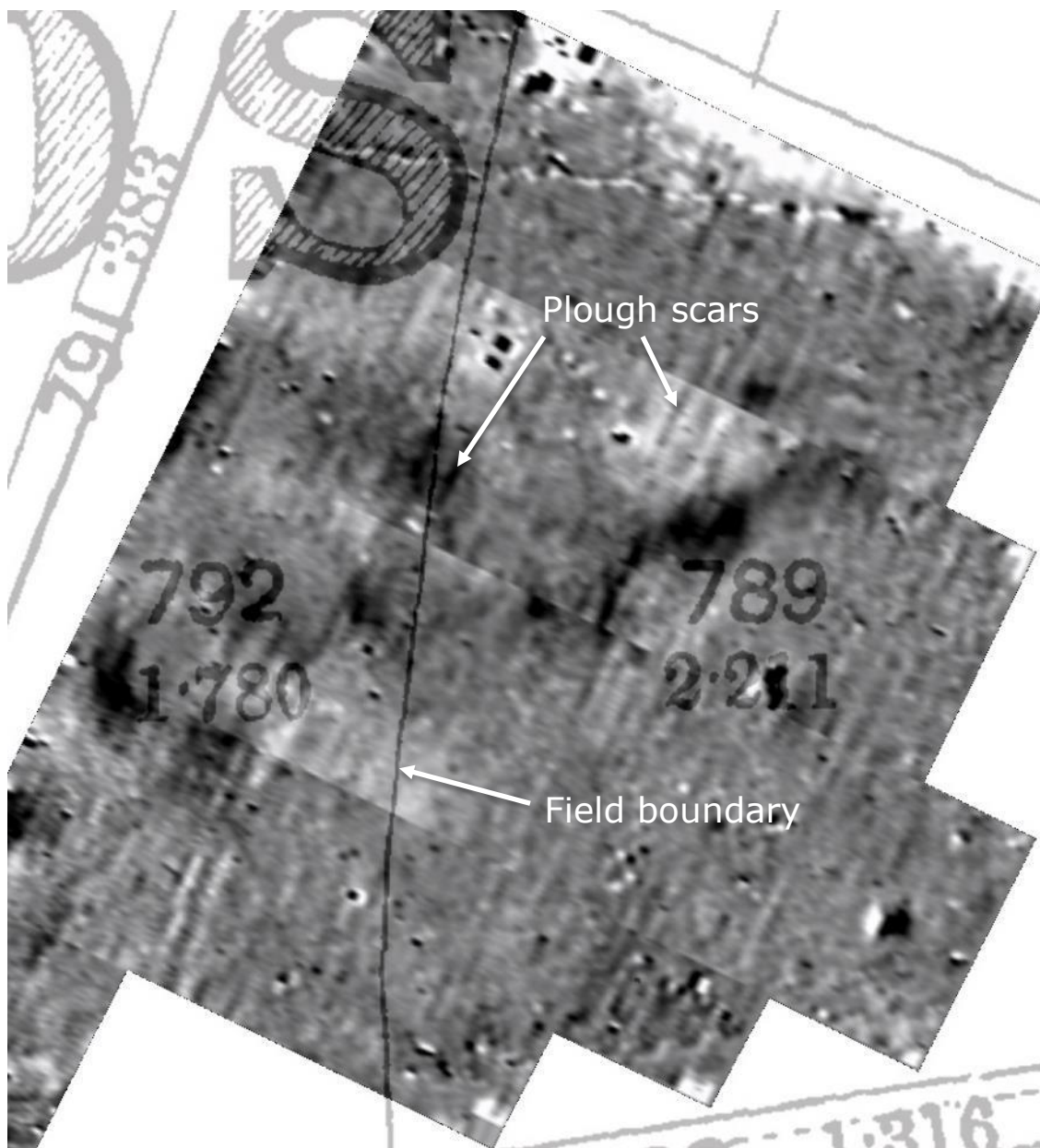


Figure 10: Geophysical plan overlain with 1st edition OS map showing differing hedge and plough scar alignment.

7. SOURCES

Published

CIfA. 2014. *Chartered Institute of Field Archaeologists Standards and Guidance for Archaeological Evaluation*

Unpublished

Day, A. 2018. *Glasfryn Road, St David's, Pembrokeshire: Historic Environment Desk-Based Assessment*, DAT Unpublished Report 2018-47.

Enright, C 2019. *Glasfryn Road, St David's, Pembrokeshire: Geophysical Survey 2019*, DAT Unpublished Report 2019-37

Database

Dyfed Archaeological Trust Historic Environment Record, housed with Dyfed Archaeological Trust in The Corner House, 6 Carmarthen Street, Llandeilo, Carmarthenshire, SA19 6AE.

Online resources

British Geological Survey, Accessed October 2021,.
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

APPENDIX I: WRITTEN SCHEME OF INVESTIGATION

PROPOSED RESIDENTIAL DEVELOPMENT, GLASFRYN ROAD, ST DAVIDS, PEMBROKESHIRE – PLANNING REF: NP/18/0575/OUT:

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EVALUATION & WATCHING BRIEF

1 INTRODUCTION

- 1.1 This Written Scheme of Investigation (WSI or specification) has been prepared by DAT Archaeological Services (the contracting arm of Dyfed Archaeological Trust) to provide a methodology for archaeological trial trenching and watching brief within an area proposed for residential development east of Glasfryn Road, St Davids, Pembrokeshire (roughly centred on SM 1577 22536, Figure 1). The development area measures approximately 1.6ha in area. Outline Planning permission has been granted for the proposed development (NP/18/0575/OUT).
- 1.2 A condition regarding archaeology has been attached to the planning permission (Condition 12) which states:
No development shall take place until a qualified and competent archaeologist has submitted a written scheme of investigation (WSI) for approval in writing by the local planning authority. This WSI will describe the different stages of the work and demonstrate that it has been fully resourced and given adequate time. On behalf of the local planning authority, their archaeological advisors DAT-DM (Dyfed Archaeological Trust - Development Management) will monitor all aspects of this work through to the final discharge of the condition. The work will not be deemed complete until all aspects of the WSI have been addressed and the final report submitted and approved.
- 1.3 In order to fulfil the planning condition DAT Archaeological Services were commissioned to prepare a WSI for the proposed archaeological work; the first stage of which was a geophysical survey within the development area east and west of Glasfryn Road. The survey was carried out in 2019, and although nothing significant was recorded in the western area (which has subsequently been developed), several potential archaeological features in the eastern area were recorded (Figures 2 and 3).
- 1.4 The WSI and archaeological works have been commissioned by Gareth Davies.
- 1.5 The site area has been subject to a geophysical survey within the development area (Figures 2 and 3). The results of the geophysical survey suggested there was some potential for remains of a former barn or cottage (Feature A) to survive within the area, aligned on the same orientation as a former field boundary suggesting some relationship between them. A segment of this field boundary (Feature B) was recorded by the survey would have once divided the field. The field boundary is represented by two parallel linear anomalies which run towards the site of Feature A.
- 1.6 In their role as archaeological advisors to the planning authority, Dyfed Archaeological Trust-Development Management (DAT-DM), have recommended that Feature A is subjected to archaeological evaluation, and that an archaeological watching brief is carried out within the area of Feature B during development groundworks.

- 1.7 The aim of the evaluation will be to provide information on the character and significance of any below ground archaeological remains that may be present within the development area as indicated by the survey. Should any significant archaeological deposits be revealed, then a programme of further mitigation can be formulated and potentially implemented prior to development. The provisional scheme outline has already been agreed and this document finalises trench locations and also methodologies to be implemented.
- 1.8 The aim of the watching brief will ensure that any archaeological remains exposed during ground-breaking works can be appropriately recorded, and a report and archive prepared.
- 1.9 This written scheme of investigation (WSI) details the methodology of the evaluation and the watching brief which will be undertaken by DAT Archaeological Services and has been prepared in accordance with the Chartered Institute for Archaeologists (CIfA) Standard and Guidance for Archaeological Field Evaluation and the Chartered Institute for Archaeologists (CIfA) Standard and Guidance for Archaeological Watching Brief (CIfA 2014). A copy will be sent to the archaeological advisors to the local planning authority for their approval³.
- 1.10 DAT Archaeological Services has considerable experience of this type of project and always operates to best professional practice. DAT Archaeological Services has its own Health and Safety Policy, and all works are covered by appropriate Employer's Liability and Public Liability Insurances. Copies of all are available on request.
- 1.11 ***Dyfed Archaeological Trust is a CIFA Registered Archaeological Organisation.***
- 1.11 ***All permanent DAT Archaeological Services staff are CSCS⁴ certified to work on construction sites.***

³ Dyfed Archaeological Trust – Development Management.

⁴ Construction Skills Certification Scheme.

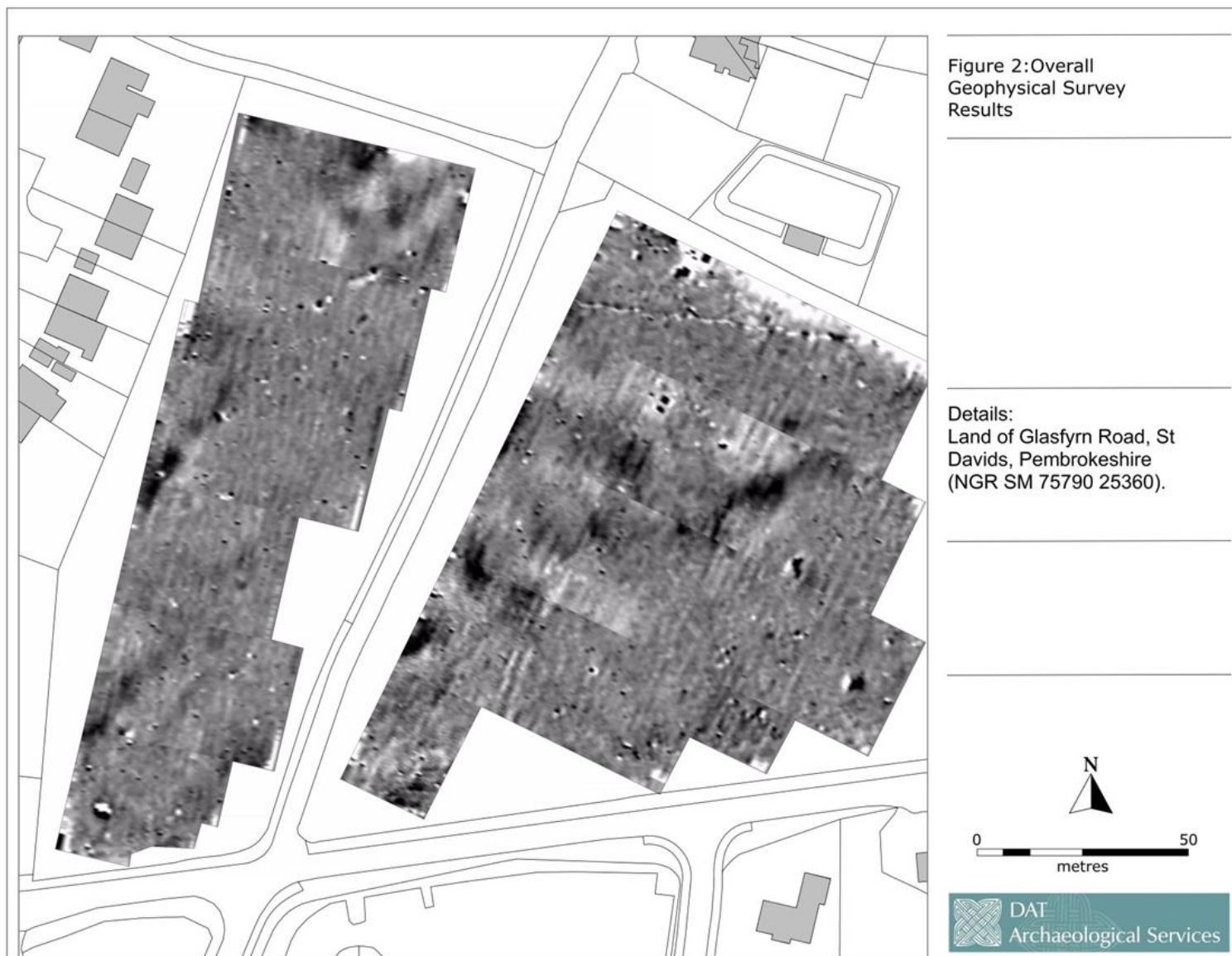


Figure 2: Geophysical results shown as a grey-scale plot.

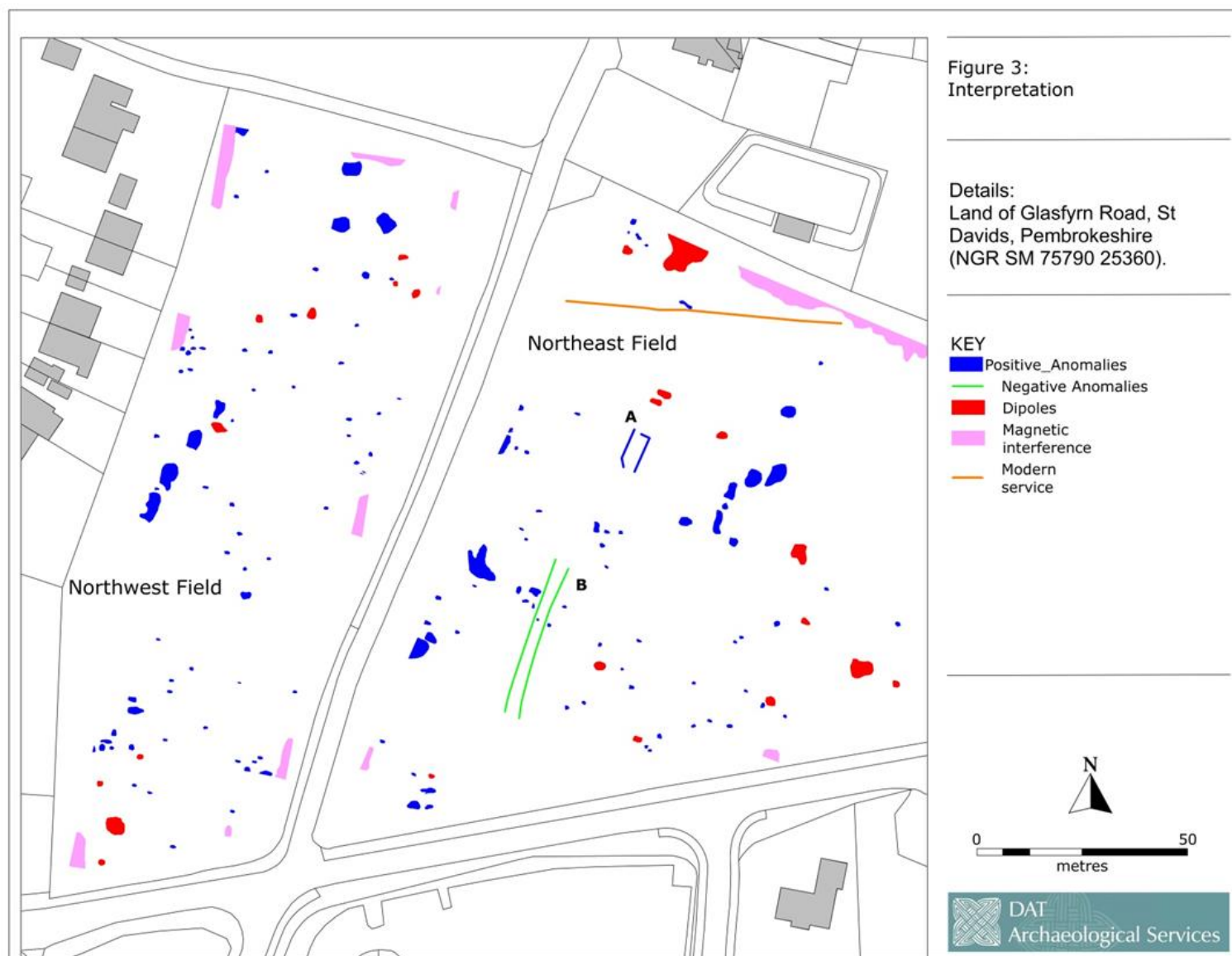


Figure 3: Geophysical survey interpretation.

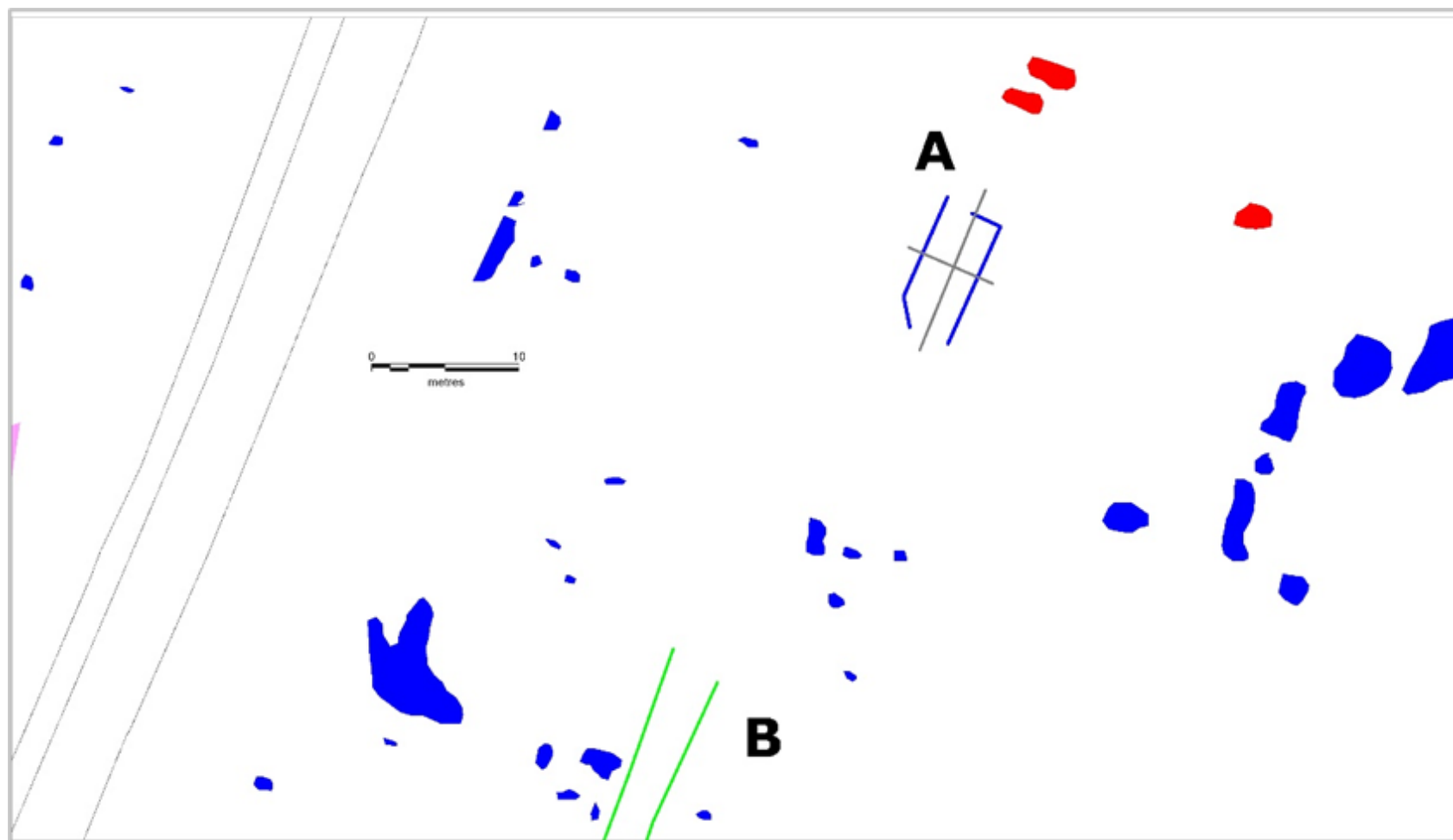


Figure 4: Proposed arrangement of evaluation trenches across Feature A.

2. AIM OF THE PROJECT

2.1 The definition of an archaeological evaluation taken from the Chartered Institute for Archaeologists Standards and Guidance for Archaeological Field Evaluation (CIfA S&G: AFE 2014) is a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their significance in a local, regional, national or international context as appropriate. The programme will result in the preparation of a report and ordered archive.

2.2 The purpose of field evaluation as laid down in the CIfA S&G AFE is:

to gain information about the archaeological resource within a given area or site (including its presence or absence, character, extent, date, integrity, state of preservation and quality), in order to make an assessment of its merit in the appropriate context, leading to one or more of the following:

a. The formulation of a strategy to ensure the recording, preservation or management of the resource

b. The formulation of a strategy to mitigate a threat to the archaeological resource

c. The formulation of a proposal for further archaeological investigation within a programme of research.

2.3 The definition of an archaeological watching brief, taken from the Chartered Institute for Archaeologists Standards and Guidance: for Archaeological Watching Briefs (CIfA S&G: AWB 2014) is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

2.4 The purpose of a watching brief, as laid down in the CIfA S&G AWB is:

a. To allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works;

b. To provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment.

2.5 This document provides a scheme of works for:

The implementation of a scheme of archaeological evaluation and watching brief within the area proposed for residential development to the east of Glasfryn Road, St Davids, Pembrokeshire. The archaeological field evaluation will determine, as far as is reasonably possible, the nature of the archaeological resource within this specified area using appropriate methods and practices. These will satisfy the stated aims on the project, and

comply with the code of conduct and other relevant regulations of CIfA. A report shall be prepared on the results of the evaluation and an archive created of all finds, records, photographs and plans created by this mitigation strategy. Further mitigation is possible where significant remains are identified; the scope of which would be determined following this stage of work.

3. PROJECT OBJECTIVES

- 3.1 Provision of a written scheme of investigation to outline the methodology by which DAT Archaeological Services will undertake the archaeological evaluation and archaeological watching brief.
- 3.2 To undertake an archaeological field evaluation in order to identify the presence/absence of any archaeological deposits.
- 3.3 To monitor groundworks through an archaeological watching brief in order to identify the presence/absence of any archaeological deposits.
- 3.4 To establish the character, extent and date range for any archaeological deposits to be affected by the proposed groundworks.
- 3.5 To appropriately investigate and record any archaeological deposits to be affected by the groundworks.
- 3.6 To produce an archive and report of any results.

4. EVALUATION METHODOLOGY

- 4.1 To better ascertain the significance and state of preservation of the potential archaeology within the development site, it is proposed that two trial trenches are excavated (Figure 4), one measuring approximately 12m by 1.6m (along the length of the anomaly) and the other 8m by 1.6m that will cross the longer trench at right angles. The trenches will target the geophysical anomaly that has been interpreted as a possible cottage.
- 4.2 Both trenches will initially be excavated using a 360° machine excavator under archaeological supervision. Thereafter, all excavation of non-archaeologically significant deposits will be done by hand to the top of archaeological deposits or the underlying natural substrata (whichever is reached first).
- 4.3 The 360° machine excavator will be fitted with a flat bladed bucket and will excavate two trenches; each measuring 1.60m wide (1 bucket width). Arisings will be stored adjacent to the stripped area (at a safe distance).
- 4.4 The trenches will be appropriately hand cleaned to prove the presence or absence, of archaeological features and to determine their significance. The trenches will be surveyed using accurate GPS or Total Station to record the identified features.
- 4.5 Features containing deposits of environmental significance will be sampled. The samples will be retained in stable conditions until analysis can be arranged.
- 4.6 All deposits will be recorded by archaeological context record sheet, scale drawing, photography and site notebooks. All individual deposits will be numbered using the open-ended numbering system in accordance with

DAT Archaeological Services' Recording Manual⁵. Significant deposits will be recorded by scale drawing (no less than 1:20); drawn plans will be related to Ordnance Datum and, where possible, known boundaries. A photographic record will be maintained using high resolution digital photography.

- 4.7 All archaeologically significant artefacts, ecofacts and samples will be retained and, where possible, related to the contexts from which they derived. Sensitive material will be stored in appropriately stable conditions. Finds will be temporarily stored by DAT Archaeological Services in stable conditions. All finds, except those deemed to be Treasure⁶, will remain the property of the landowner, but it is assumed that permission has been given by the landowner for these to be stored as part of the archive in a suitable repository (ownership will still be with the landowner).
- 4.8 Under the 1996 Treasure Act, "treasure" can be summarised as:
- Any object other than a coin containing at least 10% gold or silver and at least 300 years old;
 - Any prehistoric assemblage of base metal;
 - Coins found together which contain 10% gold or silver (but no single coins) and groups of at least 10 coins of other metals, provided they are at least 300 years old;
 - Any object found associated with treasure except unworked natural objects; and
 - Any object which would have been Treasure Trove before the 1996 Act but not covered above.
- 4.9 In the event of the discovery of human remains they will, at this evaluation stage, be left *in situ*. If removal is necessary, it will only take place following the granting of all permissions in writing by the relevant authorities and at a later stage of any necessary archaeological works (the Coroner must be informed and a burial licence granted from the Ministry of Justice).

5. ARCHAEOLOGICAL WATCHING BRIEF METHODOLOGY

- 5.1 A targeted watching brief will be maintained during development ground-breaking works at land east of Glasfryn Road, St Davids, Pembrokeshire, where there is the potential for archaeological remains to be exposed, damaged or destroyed. These groundworks could include, but are not limited to, ground clearance, levelling, foundation and service excavations.
- 5.2 It is anticipated that the archaeological watching brief will be carried out within the area of the rear extension on the north side of the existing property, to a point where it is clear that no further potential archaeological remains would be disturbed.
- 5.3 The archaeologist would monitor the groundworks works and aim to identify any archaeological remains that may be present. They will have

⁵ DAT Archaeological Services use the Recording Manual developed by English Heritage Centre for Archaeology. A copy will be available for inspection if required.

⁶ If any material deemed to be Treasure is found, the Coroner must be informed

the authority to halt groundworks in areas where archaeological remains are identified until they have been further investigated and recorded.

- 5.4 Adequate time must be made available to the visiting archaeologist to ensure that appropriate recording can be undertaken of any archaeological features or deposits exposed during the watching brief.
- 5.5 Features containing deposits of environmental significance will be sampled. The samples will be retained in stable conditions until analysis can be arranged.
- 5.6 All deposits will be recorded by archaeological context record sheet, scale drawing, photography and site notebooks. All individual deposits will be numbered using the open-ended numbering system in accordance with a recognised system, such as the DAT Archaeological Services' Recording Manual. Significant deposits will be recorded by scale drawing (no less than 1:20); drawn plans will be related to Ordnance Datum and, where possible, known boundaries. A digital photographic record will be maintained as a minimum using a high-resolution camera, with photographic information recorded for all photographs taken.
- 5.7 All archaeologically significant artefacts, ecofacts and samples will be retained and, where possible, related to the contexts from which they derived. Sensitive materials will be stored in appropriately stable conditions. Finds will be temporarily stored by DAT Archaeological Services in stable conditions. All finds, except those deemed to be Treasure, will remain the property of the landowner, but it is assumed that permission will have been given by the landowner for these to be stored as part of the archive in a suitable repository (ownership will still be with the landowner).
- 5.8 Under the 1996 Treasure Act, "treasure" can be summarised as:
 - Any object other than a coin containing at least 10% gold or silver and at least 300 years old;
 - Any prehistoric assemblage of base metal;
 - Coins found together which contain 10% gold or silver (but no single coins) and groups of at least 10 coins of other metals, provided they are at least 300 years old;
 - Any object found associated with treasure except unworked natural objects; and
 - Any object which would have been Treasure Trove before the 1996 Act but not covered above.
- 5.9 In the event that unforeseen archaeological discoveries are made during the development, or where unexpected archaeological remains of high significance are exposed, the appointed archaeological contractor will have the power to halt any ground works and shall inform the client and Development Management – Dyfed Archaeological Trust and prepare a written statement with plan detailing the archaeological evidence. Following assessment of the archaeological remains by all parties, if required, a contingency scheme for salvage excavation of affected archaeological features may need to be implemented. This event would need to be covered by contingency financial arrangements within the project budgets.
- 5.10 In the event of the discovery of human remains, all remains will be left in situ. If removal is necessary, it will only take place following the granting

of all permissions in writing by the relevant authorities (a burial licence granted from the Ministry of Justice).

6. POST-FIELDWORK REPORTING AND ARCHIVING

- 6.1 An archive will be prepared if it meets the requirements of the Dyfed Archaeological Trust archive retention policy (2018). If it does, then data recovered during the evaluation will be collated into a site archive structured in accordance with the specifications in Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation (Brown 2011), and the procedures recommended by the National Monuments Record, Aberystwyth. The National Standards for Wales for Collecting and Depositing Archaeological Archives produced by the Federation of Museums and Art Galleries of Wales will also be adhered to. Digital archives will be collated using the Royal Commission on the Ancient and Historical Monuments of Wales systems (2015) and deposited with the RCAHMW.
- 6.2 The results of the evaluation and the watching brief will be assessed in local, regional and wider contexts.
- 6.3 The results will be used to inform subsequent design of the proposed development so that they will not impact upon any archaeological remains or that mitigation can be implemented before such remains are disturbed.
- 6.4 The report will include a summary desk-based assessment element to place the site into its wider context within the area.
- 6.5 The project archive, including all significant artefacts and ecofacts, excepting those which may be deemed to be Treasure will be deposited with an appropriate body following agreement with the landowner. Finds recovered from the site will be retained or discarded in line with the Dyfed Archaeological Trust Archive Disposal Policy.
- 6.6 DAT Archaeological Services will arrange for the deposition of finds, and ascertain the costs of storage and deposition, with an approved body before the project commences and inform the curator of the arrangement which has been made. It is likely that any digital archive will be deposited with the Royal Commission on the Ancient and Historical Monuments of Wales.
- 6.7 A summary of the project results, excluding any confidential information, may be prepared for wider dissemination (e.g. Archaeology in Wales and special interest and period-specific journals).
- 6.8 The report will be prepared to follow the *Standard and Guidance for Archaeological Field Evaluations* (CifA 2014).
- 6.9 Digital copies in pdf format will be supplied to the client and also supplied to Dyfed Archaeological Trust Development Management section and the Historic Environment Record.

7. STAFF

- 7.1 The project will be managed by Fran Murphy, Head of DAT Archaeological Services.
- 7.2 The on-site works will be undertaken by experienced members of DAT Archaeological Services staff.

8. MONITORING

- 8.1 The fieldwork may need to be monitored by Dyfed Archaeological Trust Development Management in their capacity as archaeological advisors to the planning authority, who should be provided access to the site at any time during the evaluation works. However, during the current Covid-19 pandemic a different method of monitoring may be used via regular photographic updates of the work and by telephone. The Head of DAT Archaeological Services may also monitor the on-site works intermittently.

9. HEALTH AND SAFETY

- 9.1 All permanent members of DAT Archaeological Services staff are CSCS registered.
- 9.2 DAT Archaeological Services will carry out a health and safety risk assessment to ensure that all potential risks are minimised.
- 9.3 All relevant health and safety regulations must be followed, including compliance with Welsh Government guidelines on working practices during the current Covid-19 Pandemic, and guidance issued by CIfA.
- 9.4 CIfA recommends that ROs should ensure that their own risk assessments and local site operating procedures take account of Prospect's COVID-19 site working advice (updated 4 May).. These procedures are attached to the project risk assessment. If the site cannot operate in line with this guidance it must not open or continue to stay open.
- 9.5 The project risk assessment details the precautions put in place to reduce the spread of Covid-19 Coronavirus during fieldwork.
- 9.6 Trenches will be fenced whilst they are open with a mix of orange Netlon fencing and hazard tape to create a visible barrier between the trenches and surrounding land. This will avoid accidental egress into the trenches preventing trips or falls. The archaeological trenches will be around 1.6m in width and unlikely to be of any significant depth (they are unlike geotechnical test pits as they look at archaeology below the topsoil as opposed to looking at geological levels at depth).
- 9.7 Arisings from the trenches will be stored adjacent to the trenches at a safe distance to avoid material dropping back into the trenches. The spoil heaps are unlikely to exceed 1m in height.
- 9.8 All site inductions, H&S procedures, H&S constraints and site rules of the client or any on-site contractor will be made known to DAT Archaeological Services staff at the start of the works.
- 9.9 Service information has been provided to DAT Archaeological Services prior to the start of the evaluation works and shows no known services within the evaluation area.
- 9.10 Safety helmets, high visibility vests and boots are to be used by all site personnel as necessary. The developer will make all site staff aware of any other PPE that may be required.
- 9.11 Working with machinery: DAT Archaeological Services staff must ensure that their presence on site is communicated to all relevant site staff, especially the machine operator. The archaeologist observing the excavation of trenches by machine will establish a safe working procedure with the machine operator at the start of work. This will include explaining the purpose of the works itself and the method by which the trenches shall be machined. This will include ensuring that the machine

driver is aware that topsoil is stripped carefully to avoid disturbing archaeology. This will also include discussing the methodology for safe working, ensuring that no machining is done without an archaeologist being present.

- 9.12 The site staff will go through the risk assessment prior to the works commencing and all site staff must sign the document to confirm that they have read, understood and will comply with the document.

10. QUALITY ASSURANCE

- 10.1 DAT Archaeological Services has considerable experience of undertaking all categories of archaeological fieldwork and always operates to best professional practice; adhering to CIfA guidelines where appropriate. The Trust is a Registered Organisation with CIfA and all staff abide by their code of conduct and adhere to their relevant standards and guidance.
- 10.2 DAT Archaeological Services operate robust internal monitoring procedures that ensure that the standard of each project is maintained from commencement to completion.

