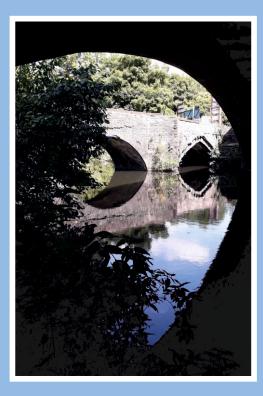
Leckwith Quay, Cardiff and Vale of Glamorgan

Archaeological desk-based assessment

August 2019

A report for Gareth Davies Project Services By Sophie Lewis-Jones BA ACIfA GGAT report no. 2019/041 Project no. P2020 National Grid Reference: ST 15894 75207







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Summary

The Glamorgan-Gwent Archaeological Trust, Projects Department was commissioned by Gareth Davies Project Services to carry out an archaeological desk-based assessment in order to support a planning application for land at Leckwith, Cardiff and Vale of Glamorgan. This report contains the results of cartographic, archaeological and documentary research focused on a study area of 750m from the proposed development boundary centred on NGR ST 15884 75224.

Forty-two sites of direct archaeological interest were identified within the study including 5 new sites and additionally but indirectly, viewsheds from two Registered Historic Parks and Gardens namely Gm 71 Thompson's Park (Sir David's Field) and Gm 73 Fairwood House, Cardiff.

Ten sites are directly within the proposed development area including Scheduled Monument and Grade II* Listed Building Leckwith Bridge (GM014/0134S/LB13748/LB26487/24126), Leckwith New Bridge and Viaduct (307689), Limekiln (04120s) Structures (04122s, 04125s) and five new sites - LQ001 (Leckwith Bridge Public House), LQ002 (Old Weir), LQ003 (Cottage), LQ004 (Milestone) and LQ005 (Drain cover). It is considered that any proposed development will have a 'Major to Minor' effect on these identified sites.

Preservation in situ is the preferred Welsh Government policy. If this were not possible, as a minimum, an archaeological watching brief would be the likely mitigation on all ground disturbing works connected with Leckwith Bridge, Structures 04122s and 04125s, Limekiln 04120s, Old Weir LQ002, Cottage LQ003 and milestone LQ004.

In addition to the recommended archaeological watching brief mitigation, it is considered that Leckwith Bridge House (LQ001) should be mitigated by means of a Level 3 building survey and Leckwith New Bridge and Viaduct (307689) and Drain cover (LQ005) should be mitigated by means of a photographic survey.

Any such archaeological mitigation works should be tailored to detailed construction proposals and will be determined by the LPA.

Consultation with Cadw is also strongly advised regarding mitigation measures for Scheduled Monument and Grade II* Listed Building Leckwith Bridge (00134S/GM014/LB13748/LB26487/24126) and the Registered Historic Parks and Gardens Gm 71 Thompson's Park (Sir David's Field) and Gm 73 Fairwood House.

This study has been undertaken to the professional standards of the Chartered Institute for Archaeologists and is intended to meet the Standards and Guidance for Historic Environment Desk-based Assessments (2017).

Leckwith Quay, Cardiff and Vale of Glamorgan: archaeological desk-based assessment

Comisiynwyd Adran Prosiectau Ymddiriedolaeth Archaeolegol Morgannwg-Gwent, gan Wasanaethau Prosiectau Gareth Davies, i gynnal asesiad desg archaeolegol er mwyn cefnogi cais cynllunio ar gyfer tir yn Lecwydd, Caerdydd a Bro Morgannwg. Mae'r adroddiad hwn yn cynnwys canlyniad ymchwil gartograffig, archaeolegol a dogfennol sy'n canolbwyntio ar ardal astudio 750 m i ffwrdd o ffin y datblygiad arfaethedig, sydd â'i ganol yn NGR ST 15884 75224.

Nodwyd 42 o safleoedd o ddiddordeb archaeolegol yn yr astudiaeth, gan gynnwys pum safle newydd ac, yn ychwanegol ond yn anuniongyrchol, ardal ddaearyddol sy'n weladwy o ddau Barc a Gardd Hanesyddol Cofrestredig, sef Gm 71 Parc Thompson (Cae Syr David) a Gm 73 Tŷ Fairwood, Caerdydd.

Mae yna ddeg safle yn uniongyrchol o fewn yr ardal ddatblygu arfaethedig, gan gynnwys Heneb Gofrestredig ac Adeilad Rhestredig Gradd II* Pont Lecwydd (GM014/ 0134S/ LB13748/ LB26487/ 24126), Pont Newydd a Thraphont Lecwydd (307689), Odyn Galch (04120s) Adeileddau (04122s, 04125s) a phum safle newydd – LQ001 (Tŷ Tafarn Pont Lecwydd), LQ002 (Hen Gored), LQ003 (Bwthyn), LQ004 (Carreg Filltir) ac LQ005 (Gorchudd Draen). Ystyrir y bydd unrhyw ddatblygiad arfaethedig yn cael effaith 'Fawr i Fach' ar y safleoedd hyn a nodir.

Cadwraeth ar y safle yw polisi dewisol Llywodraeth Cymru. Pe na fyddai hyn yn bosibl, byddai briff gwylio, o leiaf, yn fesur lliniaru tebygol ar gyfer unrhyw waith sy'n anhrefnu'r ddaear ac sy'n gysylltiedig â Phont Lecwydd, Adeileddau 04122s a 04125s, Odyn Galch 04120s, Hen Gored LQ002, Bwthyn LQ003 a charreg filltir LQ004.

Yn ychwanegol at fesur lliniaru'r briff gwylio archaeolegol, ystyrir y dylai Tŷ Pont Lecwydd (LQ001) gael ei liniaru trwy gyfrwng arolwg Lefel 3 gan yr adran adeiladu, ac y dylai Pont Newydd a thraphont Lecwydd (307689) a'r Gorchudd Draen (LQ005) gael eu lliniaru trwy gyfrwng arolwg ffotograffig.

Dylai unrhyw waith lliniaru archaeolegol o'r fath gael ei deilwra i gynigion adeiladu manwl, a chaiff ei bennu gan yr Awdurdod Cynllunio Lleol.

Argymhellir yn gryf y dylid hefyd ymgynghori â Cadw mewn perthynas â mesurau lliniaru ar gyfer Heneb Gofrestredig ac Adeilad Rhestredig Gradd II* Pont Lecwydd (00134S/GM014/LB13748/LB26487/24126) a'r Parciau a Gerddi Hanesyddol Cofrestredig Gm 71 Parc Thompson (Cae Syr David) a Gm 73 Tŷ Fairwood.

Paratowyd yr astudiaeth hon yn unol â safonau proffesiynol Sefydliad Siartredig yr Archaeolegwyr, a bwriedir iddi fodloni'r Safon a'r Canllawiau ar gyfer Asesiadau Desg Archaeolegol (2017).

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The project has been managed by Martin Tuck MCIfA (Senior Project Manager); the report was researched and prepared by Sophie Lewis-Jones ACIfA (Project Archaeologist) of GGAT Projects. The illustrations were prepared by Paul Jones PCIfA (Senior Illustrator of GGAT Projects). The author is grateful to Vivien Davies (CRAPW), Nigel Davies (Cadw), Lynne Moore (RCAHMW) and the staff of the Glamorgan Archives. The author is also grateful to Issica Baron for research and James Toseland for assistance with the walkover.

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Abbreviations

CRAPW:	Central Register of Air Photography for Wales
GGAT:	Glamorgan-Gwent Archaeological Trust
HER:	Historic Environment Record (curated by GGAT Curatorial)
LB:	Listed Building
LPA:	Local Planning Authority
MCXX:	New sites identifies during this assessment
NGR:	National Grid Reference
NLW:	National Library of Wales
NMR:	National Monuments Record (curated by RCAHMW)
NPRN:	National Primary Record Number (in NMR) eg 420868
PGW:	Registered Park and Garden in Wales (Cadw and ICOMOS UK 1998)
PRN:	Primary Record Number (in HER - indicated by a letter suffix, in this case's')
RCAHMW:	Royal Commission on the Ancient and Historical Monuments of Wales
SM:	Scheduled Monument (prefixed by the letters GM, e.g. GM014)

Introduction

Commission background

The Glamorgan-Gwent Archaeological Trust, Projects Department was commissioned by Gareth Davies Project Services to carry out an archaeological desk-based assessment in order to support a planning application for land at Leckwith, centred on NGR ST 15884 75224. The development area lies on the border of Cardiff and Vale of Glamorgan Unitary Authorities, seen following the western bank of the River Ely (Cardiff UA to the East, Vale of Glamorgan to the West). The desk based assessment reviewed information held by the Regional Historic Environment Record (HER), the National Monuments Record (NMR), Scheduled Ancient Monument and Listed Building information, as well as examining aerial photographs, cartographic and documentary sources.

Specification and methodology for study

The desk-based assessment comprises a review of existing information about the archaeological resource within a 750m study area around the development site, centred on NGR ST 15884 75224 (Figure 1). The assessment is intended to conform to the Chartered Institute for Archaeologists *Standards and Guidance for Historic Environment Desk-based Assessments (2017)*.

The information recorded on the regional Historic Environment Record (HER, Enquiry Reference: 5769) and National Monuments Record (NMR – Curated by the Royal Commission on the Ancient and Historical Monuments of Wales, Enquiry Reference: RC18-0239) was assessed. Cartographic and documentary sources were referred to, along with relevant published information. Current Listed Building data and information on Scheduled Ancient Monuments and Registered landscapes was obtained from Cadw. Collections of aerial photographs held by the Central Register of Air Photography for Wales (CRAPW) were examined (Enquiry Reference: W-AP-PR 18-083).

The following legislation has been noted as relevant for the current assessment.

The Historic Environment (Wales) Act 2016

The Act makes amendments to The Ancient Monuments and Archaeological Areas Act 1979 and to The Planning (Listed Buildings and Conservation Areas) Act 1990. It aims to deliver improved protection of scheduled monuments and listed buildings in Wales, to enhance the management of the historic environment and to establish a greater degree of transparency and duty regarding decisions that affect the historic environment. It also includes provisions concerning historic place names, a historic environment record for each local authority in Wales and for the formation of the Advisory Panel for the Welsh Historic Environment.

The Ancient Monuments and Archaeological Areas Act 1979

The Act was introduced to make provision for the investigation, preservation and recording of matters of archaeological or historical interest and for the regulation of operations or activities affecting such matters. It necessitates Scheduled Monument Consent for any works of demolition, repair, and alteration that might affect a Scheduled Monument.

The Act sets out a presumption in favour of preservation *in-situ* concerning sites and monuments of national importance.

The Planning (Listed Buildings and Conservation Areas) Act 1990

The Act sets out the legislative requirements which must be regarded in the determination of any application affecting either listed buildings or a conservation area. The Act (Section 66)

states that in considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

Planning Policy Wales 2018

Planning Policy Wales (PPW), Edition 10, Chapter 6, section 6.1) deals with the protection of the historic environment in Wales. This sets out the land use planning policies of the Welsh Assembly Government. The Objectives of PPW are to:

- the general well-being of present and future generations;
- understand that the historic environment is a finite, non-renewable and shared resource and a vital and integral part of the historical and cultural identity of Wales
- recognise its contribution to economic vitality and culture, civic pride, local distinctiveness and the quality of Welsh life, and its importance as a resource to be maintained for future generations;
- Cadw's published Conservation Principles highlights the need to base decisions on an understanding of the impact a proposal may have on the significance of an historic asset.
- protect the Outstanding Universal Value of the World Heritage Sites in Wales;
- conserve archaeological remains, both for their own sake and for their role in education, leisure and the economy;
- safeguard the character of historic buildings and manage change so that their special architectural and historic interest is preserved;
- preserve or enhance the character or appearance of conservation areas, while at the same time helping them remain vibrant and prosperous;
- preserve the special interest of sites on the register of historic parks and gardens; and
- protect areas on the register of historic landscapes in Wales.
- consideration of the setting of an historic asset which might extend beyond its curtilage;
- any change that impacts on an historic asset or its setting should be managed in a sensitive and sustainable way
- protection, conservation and enhancement of historic assets is most effective when it is considered at the earliest stage of plan preparation or when designing proposals new proposals
- must fully consider the impact on the historic environment and on the significance and heritage values of individual historic assets and their contribution to the character of place

Technical Advice Notice (TAN) 24 2017

The purpose of this TAN is to provide guidance on how the planning system considers the historic environment during development plan preparation and decision making on planning and Listed Building (LBC) to be used in conjunction with PPW. This guidance replaces Welsh Office Circulars 60/96, 61/96 and 1/98. The TAN provides specific guidance on how the following aspects of the historic environment should be considered: World Heritage Sites;

Scheduled Monuments; archaeological remains; Listed Buildings; Conservation Areas; historic parks and gardens; historic landscapes; and historic assets of special local interest.

Standard and Guidance for historic environment desk-based assessment (CIfA)

This guidance published in 2014 (updated 2017) applies to all types of non-intrusive assessment of the historic environment and aims to define a framework of study for carrying out and the reporting of desk-based assessments in line with the CIFA Code of conduct.

Conservation Principles for the Sustainable Management of the Historic Environment in Wales 2011 (Cadw)

These principles provide the basis upon which Cadw discharges certain statutory duties on behalf of the Welsh Ministers. Conservation Principles should be used by others (including owners, developers and other public bodies) to assess the potential impacts of a development proposal on the significance of any historic asset/assets and to assist in decision making where the historic environment is affected by the planning process.

Setting of Historic Assets in Wales 2017 (Cadw)

Cadw has published guidance for assessing the impacts of development on the setting of historic assets. It lays out the meaning behind the term 'setting' in relation to a historic asset and who and when the setting should be assessed. The guidance sets out a staged process of assessing the impact of change on a setting.

- Stage 1: Identify the historic assets that might be affected by a proposed change or development.
- Stage 2: Define and analyse the settings to understand how they contribute to the significance of the historic assets and, in particular, the ways in which the assets are understood, appreciated and experienced.
- Stage 3: Evaluate the potential impact of a proposed change or development on that significance.
- Stage 4: If necessary, consider options to mitigate or improve the potential impact of a proposed change or development on that significance.

The guidance from Cadw states that Local planning authorities must consult Cadw on all planning applications which in their opinion are within the setting of a scheduled monument and meet certain criteria listed in the guidance document. Applications will need to include sufficient information to assess the impact of the proposal on the historic asset and its setting, but this should be proportionate to the likely impact of the proposal.

Local Development Plan (Cardiff)

The Cardiff Local Development Plan 2006 - 2026 was adopted on January 2016. As one of the fastest growing cities in UK, it is vital that new development is guided by an up-to-date development plan. The LDP provides the necessary framework and certainty to bring forward the new homes (especially affordable/family housing) and jobs which are required in a managed manner.

Policy KP17 Built Heritage states that Cardiff's distinctive heritage assets will be protected, managed and enhanced, in particular the character and setting of its Scheduled Monuments; Listed Buildings; Registered Historic Landscapes, Parks and Gardens; Conservation Areas;

Locally Listed Buildings and other features of local interest that positively contribute to the distinctiveness of the city. This will be preserved or enhanced by;

- This Policy affords appropriate protection to these monuments and others that may be scheduled over the Plan period, as well as other important archaeological remains identified within the Historic Environment Record.
- Archaeologically Sensitive Areas will provide further guidance on four areas of the city where significant finds have been recorded. 109 Cardiff Local Development Plan 2006 2026 Adopted Plan 4.
- This Policy affords appropriate protection to these statutory listed buildings and others that may be added to the list by Cadw over the Plan period.
- The Council also holds a Local List of Buildings of Merit. This Policy identifies the significance of these locally listed buildings (and others that may be added to the list by the Council over the Plan period) have in forming the character of the area.
- This Policy affords appropriate protection to these and other areas that may be designated by the Council over the Plan period. The Policy should be read in conjunction with the adopted Conservation Area Appraisal prepared for each area, including the enhancement proposals included within them.
- This Policy affords appropriate protection to these and other historic parks, gardens and landscapes that may be added to the register by Cadw/ICOMOS over the Plan period.

Local Development Plan (Vale of Glamorgan)

The Vale of Glamorgan Local Development Plan 2011 - 2026 was adopted on 28th June 2017. The LDP became operative on its adoption and supersedes the previous adopted Unitary Development Plan (UDP). The LDP will be the basis for decisions on land use planning in the Vale of Glamorgan and will be used by the Council to guide and manage new development proposals.

The Plan sets out the vision, objectives, strategy and policies for managing development in the Vale of Glamorgan, and contains a number of local planning policies and makes provision for the use of land for the purposes of housing, employment, retailing, recreation, transport, tourism, minerals, waste, and community uses. It also seeks to identify the infrastructure that will be required to meet the growth anticipated in the Vale of Glamorgan up to 2026, and provides a monitoring framework for assessing the effectiveness of the Plan.

Policy MD8 states that development proposals must protect the qualities of the built and historic environment of the Vale of Glamorgan, specifically:

- Within conservation areas, development proposals must preserve or enhance the character or appearance of the area;
- For listed and locally listed buildings, development proposals must preserve or enhance the building, its setting and any features of significance it possesses;

- Within designated landscapes, historic parks and gardens, and battlefields, development proposals must respect the special historic character and quality of these areas, their settings or historic views or vistas;
- For sites of archaeological interest, development proposals must preserve or enhance archaeological remains and where appropriate their settings.

Assessment criteria

Direct effects (Monuments)

The archaeological sites within the study area are categorised in accordance with the only available criteria that are nationally agreed; these values are set out in the Department of Transport/Welsh Office/Scottish Office *Design Manual for Roads and Bridges* paragraph 3.4 Vol. 11 Section 3 Part 2 (HA 208/07 Cultural Heritage).

- Category A: national importance
- Category B: regional importance
- Category C: local importance
- Category D: low importance

To these an additional category has been added

• Category U: unknown

The assessment of the importance of individual sites is essentially a subjective exercise based upon the experience of the project team. The importance of certain sites will be implied by their status within the statutory framework. Scheduled Monuments will always be of national importance; Listed Buildings will be of at least regional importance. **Values** assigned to other sites are given both in relation to their individual importance and to their context within the wider landscape.

The **condition** of individual sites and the general overall condition of surviving remains has bearing on the value of the sites themselves and on the value that they impart within a wider landscape context. The condition of sites is recorded following the system used by the GGAT HER, using the following criteria:

- Intact: the site is intact
- Near intact: the site is nearly intact
- Damaged: the site has been moderately damaged
- Near destroyed: the site has nearly been destroyed
- Destroyed: the site has been destroyed
- Restored: the site has been restored
- Moved: the site has been moved (usually finds)
- Not known: the condition of the site is not known

For the purposes of desk-based assessments, **rarity** is assessed at regional level only. The following criteria are used:

- High: very few sites of this type are known
- Medium: the site is not unusual, but cannot be considered common
- Low: the site is quite common

Group association is where a connection between sites within the landscape can be demonstrated. These will usually be of the same period, but may include groups where the presence of an earlier site or sites has led to the formation of a later complex, or where an

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earlier site or sites can be shown to have acquired importance as part of a later complex. The criteria are as follows:

- High: the site forms part of an interconnected complex occupying a clearly definable landscape where little or no fragmentation has occurred
- Medium: the site is part of an interconnected complex, which is either limited in scope or badly fragmented
- Low: there are few or no other sites, which are associated

Historical association is where there is a link between the site and known historical or cultural persons or events. Prehistoric sites, which are by definition before historical evidence, cannot have any contemporary historical association, but they may acquire later associations. For the Roman and Early-medieval periods, where survival of historical evidence is poor and patchy, any contemporary documentation at all will be important. Two classifications are given for historical association, one reflecting the certainty of the identification, and the other its importance. Only sites with certain or possible association can be assessed for importance, and historical association can only increase the importance of a site; the absence of it will never decrease its importance.

Historical association- identification

- Certain
- Possible
- Unknown

Historical association- importance

- High
- Medium
- Low

The assignment of values to identified interests requires consideration of the reliability and accuracy of the source data, ranging from fully-recorded features seen in open excavation to antiquarian comments on finds of note from a poorly-defined location.

The confidence with which the values have been assigned is noted, using the following criteria:

- High: existing information is reliable and detailed
- Medium: existing information is apparently reliable but limited in detail
- Low: existing information is too limited to allow its reliability to be assessed

The **effect** of the proposal on the archaeological resource has been assessed using the following criteria:

- Severe: total loss
- Major: significant loss, likely to result in a reduction of value of the surviving site
- Minor: loss unlikely to result in a reduction of value of the surviving site
- None: no identifiable effect
- Beneficial: development will protect, preserve or enhance the site better than if the development did not occur

Indirect Effects (Monument and Landscape settings)

Indirect effects identified for the archaeological resource include those of visibility and setting issues. Only monuments of National and Regional importance with a direct visual significance will be assessed for indirect effects. If the development is situated within (or sometimes in close proximity to) a Registered Historic Landscape then an ASIDOHL2 (Assessment of the

Significance of the Impact of Development on Historic Landscape) assessment is usually required.

The following indirect visual assessment does not conform to the full ASIDOHL2 methodology. However, in order to ensure a thorough evaluation, indirect effects have been assessed employing the *principles* of ASIDOHL2.

Indirect effects to category A and B sites will be measured against criteria for the assessment of indirect, visual impacts based upon the ASIDOHL2 methodology in *Guide to Good Practice* on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process (2nd Edition 2007). The grading for the assessment is as follows:

- Very severe: the setting of, key views and/or essential lines of sight to and from the monument are dominated or obscured by the development. The form, scale and appearance, including motion, of the development, compromise the cultural integrity of the monument and its setting resulting in severance of historical links and/or degradation of an unaltered setting.
- Severe: the setting of, key views and/or essential lines of sight to and from the monument are interrupted by the development. The form, scale and appearance, including motion, of the development, largely affects the cultural value of the monument and its setting resulting in possible severance of historical links and/or uncharacteristic change to a largely unaltered setting.
- **Considerable:** the development is significantly visible in or interrupts the setting of, key views and/or essential lines of sight to and from the monument. The form and appearance, including motion of the development results in discordance with the monument and change to a largely unaltered setting.
- **Moderate:** the development is visible in key views and/or essential lines of sight to and from the monument and its setting. The form and appearance, including motion of the development results in discordance with the monument and/or alteration to its setting.
- **Slight:** the development is noticeable in key views and/or essential lines of sight to and from the monument and its setting. The form and appearance, including motion of the development is noticeable and results in minor alteration to the setting of the monument.
- Very slight: the development is barely noticeable within the setting of, key views and/or essential lines of sight to and from the monument. The setting is already largely altered and unsympathetic and/or the form and appearance, including motion of the development is barely noticeable and results in little discernible change to the setting.
- None: the development is not noticeable within the setting of, key views and/or essential lines of sight to and from the monument. The setting is already altered and unsympathetic and/or the form and appearance, including motion of the development is not noticeable and results in no discernible change to the setting.

The assessment of individual sites is essentially a subjective exercise based upon the experience of the project team. The following aspects will be considered when determining the results of the assessment.

- Any potential impacts that the development may have on the relationships of the monument to its surrounding landscape, including other monuments.
- The nature, extent and intrinsic value of the monument's setting, including its role in relation to the monument; the impact to both the immediate, essential setting and the wider setting is considered.

• Interference with the inter-visibility between the monument and other related monuments or particular landscape elements, impact to key viewpoints, vistas and lines of sight.

The purpose of the monument and significance of views to and from it will be considered in terms of visual intention. Whilst the location, construction and function of some monuments were specifically chosen to afford views of a particular area or monument(s), others may instead have been the targets of observation. The visual impact of the development in terms of form, scale, appearance and the effect of movement of constituent parts as well as the extent of encroachment of the development into the setting (both immediate and wider) of the monument should be considered.

Impacts to the direct lines of sight as well as impacts upon wider views of monuments will be determined and graded using the categories described above (very severe down to very slight).

Hedgerow Regulations

The Environment Act 1995 (section 95) allowed regulations to be drawn up to protect important hedgerows from activities that were not subject to planning consent. The Environment Act 1995 Hedgerow Regulations 1997 were specifically intended to provide objective criteria of importance which could be applied consistently across England and Wales. Thus although administered by the local planning authorities, the opportunity to develop local criteria for protection was restricted to designation as a key landscape characteristic for development control purposes (Section7b ii) by the relevant date (April 1997). The regulations permit the removal of any hedgerow (including any stretch of hedgerow) for 'carrying out development for which planning permission has been granted' on the basis that the development control process provides a framework for weighing up the loss of hedgerows against the benefits of a proposal. Thus in such a context the significance of surviving hedgerows needs to be considered.

The regulations were the subject of a review by the Department of the Environment, Transport and the Regions, *Review of the Hedgerow Regulations 1997* (1998), which suggested a simplified set of criteria, notably to include all pre-1845 or pre-1800 hedgerows where the field system is substantially complete. The Government noted the proposed changes but has not endorsed them (*The Government's response to the Environment, Transport and Regional Affairs Committee's Report 'The Protection of Field Boundaries' 1999*). The 1997 criteria therefore remain in force. Judicial Review of the application of the regulations (Flintshire County Council v NAW and Mr J T Morris) has clarified the interpretation of some of the criteria.

The criteria of historic importance in *The Hedgerow Regulations 1997* can be summarised as:

- marking a parish or township boundary
- incorporating or associated with a Scheduled Monument or site on the SMR at the relevant date
- marking a pre-1600 AD manor or estate boundary, or related to a building of such a manor or estate
- part of a field system pre-dating 1845 shown on a map in a Record Office
- part of a pre-1845 field system that is substantially complete
- part of a pre-1845 field system where the pattern was identified in 1997 as a key landscape characteristic

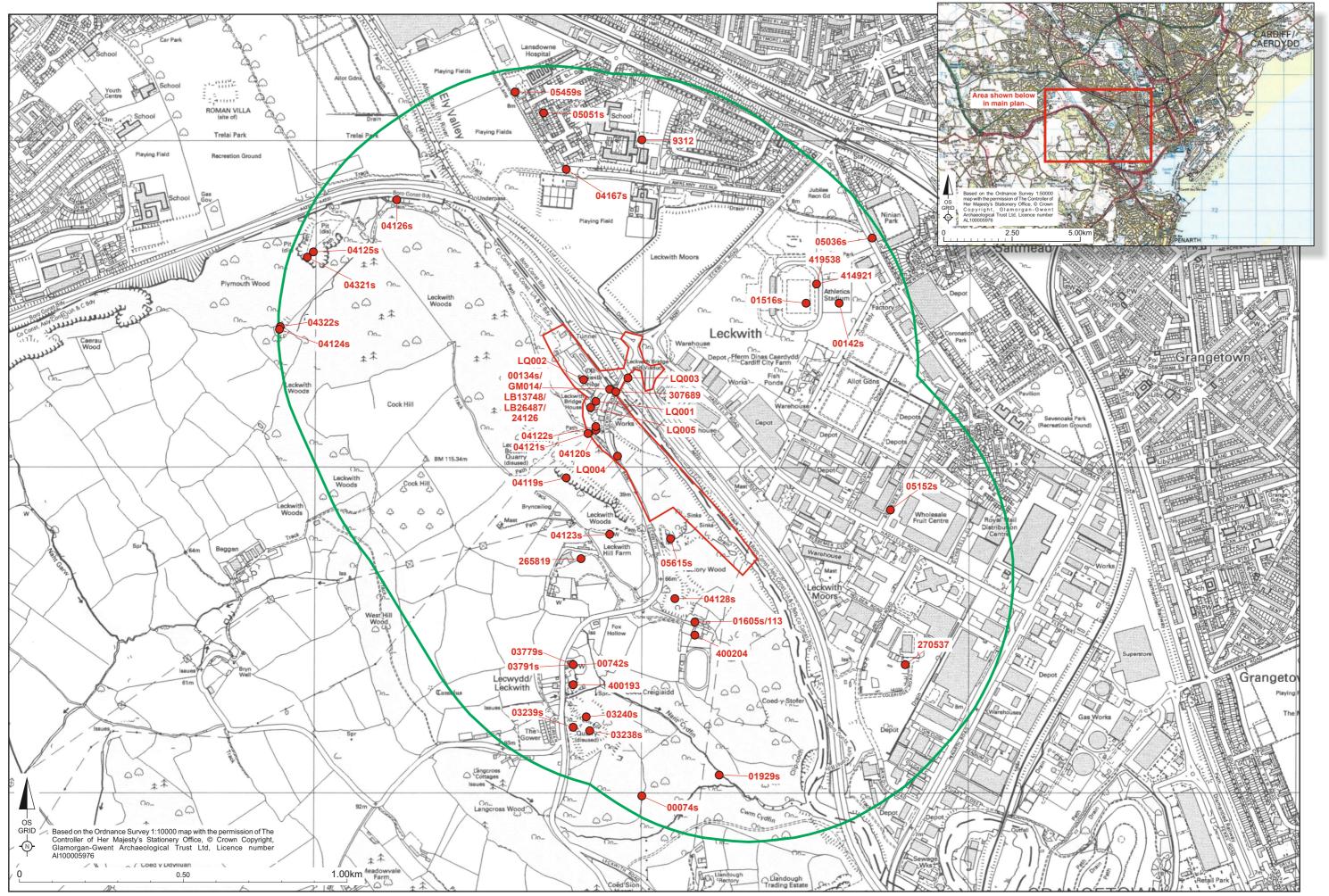


Figure 1. Proposed development area (red outline), study area (green outline) and sites of archaeological interest (red).

Background

Location, Topography and Geology

The proposed development area (Figure 1) is centred on NGR ST 15894 75207 to the west of Leckwith Capital Retail Park and on the western side of the River Ely. The area currently comprises various small-scale industrial units, including a concrete supply works, bounded by the River Ely to the east, and Ancient Semi Natural Woodlands (No 8117) to the west namely Company's Wood and Factory Wood and (14161) to the South. The area is generally flat, with an elevation of between 15m and 30m OD within the woodland.

The geology of the area comprises a bedrock geology of the Mercia mudstone group, overlain by superficial deposit of tidal flat clays, silts and sands (BGS 2019).

The greater part (west of the river) of the study and development area is located within the Vale of Glamorgan LANDMAP Historic Landscape of Leckwith and Cwm Cydfin (VLFGLHL025) character area. The Cardiff side (east of the river) has no Historic Landscape Characterisation area.

The Historic landscape summary gives a description of; Unenclosed woodland occupying the Leckwith and Cydfin valley sides, the regular fieldscape of VOGHL24 has encroached upon this woodland to minimal effect and what is visible today has altered little since the publication of the first edition Ordnance Survey map (1878). Industry within the aspect area is restricted to several small quarries opposite Leckwith Bridge, although the name given to Factory Wood may hint to an industrial past. Leckwith Bridge is medieval in origin, Leland recorded the bridge as being "soundly built of stone" in 1536, and it was possibly partly reconstructed in the 17th century, with the central arch probably rebuilt a century later. The bridge has three arches, two being pointed with double arch-rings built in two orders; the middle arch has been rebuilt. Medieval remains of a dam, now destroyed, are located in the bottom of Cwm Cydfin. The dam was formed by dumping and scarping across ravine in order to form deep pond to the north; no mill site has yet been (identified).

The evaluation survival description listed as Moderate includes 'The unenclosed, heavily wooded slopes of the Cwm Leckwith and Cwm Cydfin have remained largely intact. Apart from a small number of late 19th-20th century clay and stone quarries, few archaeological sites have been identified within this area, although names such as Company Wood and Factory Wood marked on the OS 1st edition map, and the documented evidence for a medieval dam at the bottom of Cwm Cydfin hint at the existence of other industrial sites situated on the valley slopes during the medieval/early post-medieval periods'.

There are no Registered Historic Landscapes within the proposed development area. The nearest is HLW (Gt) 2 Gwent Levels (Cadw et al 1998, 2000, and 2001), approximately 7.5km to the east of the development area.

Historical and archaeological background

Prehistoric (10,000BC to 43AD)

Although the area has been utilised for human activity since the Mesolithic period, direct evidence is largely restricted to chance finds, including a Neolithic axe-head from Ely (0098s), and a Bronze Age hoard and separately found sword from the land between the Rivers Taff and Ely (00074s and 01722s). A Bronze Age barrow, the Leckwith Tumulus, (00073s) lies 1.3km to the west of the development The Iron Age hillfort at Caerau (00942s) lies 2.2km to the west of the study area.

Roman (43AD -410)

Military activity seems to have been concentrated on the fort at Cardiff Castle, on the east bank of the River Taff, but one of the few villas known from Wales has been found at Trelai Park, Ely Villa (00100s, NPRN 301355) just over a kilometre northwest of the proposed development area.

Early Medieval and Medieval (410-1485)

The medieval village of Leckwith, probably linear in form, appears to have been between the church (00742s) to the bridge over the Ely (00134s). There was a mill at Leckwith, and a dam on the Nant Cydfin (01929s) which may relate to it.

The area to the west of Cock Hill saw considerable changes in settlement; Beggan (00730s) was once an independent manor, and there was an early Norman military site at Brynwell (02205s). Further to the west lies the deserted medieval village of Wrinstone.

Post-medieval and modern (1485-1901 on)

The road from Cardiff to Dinas Powys was improved in the late 18th century, and a new bridge built over the Ely, downstream of the earlier one.

Post-medieval activity probably included the clearance of the summit of Cock Hill for walled fields, and the continued use of the slopes for plantations. The quarrying activity indicated on recent maps is probably 19th century.

In the surrounding area, a dispersed pattern of settlement continued, with farms at Beggan, Brynwell (01604s) and Ynyston (01605s).

To the east of the development lies Leckwith Moors. Leckwith Moors featured an 'irregular landscape' of rectangular, square and regular shaped fields. This suggests a fairly later (Post medieval) landscape development, compared to other moors around Cardiff (Rippon, 1996).

Two registered parks and gardens lying outside the proposed development area but with significant views towards the northern end of the area of interest are Gm 71 Thompson's Park (Sir David's Field), and the Gm 73 Fairwood House, Cardiff.

Previous Archaeological Work

There has been little direct archaeological intervention within the study area but a number of desk-based studies have been undertaken.

A desk-based assessment (E004368) was undertaken 600m northeast of Leckwith Bridge, (00134S/GM014/LB13748/LB26487/24126) for proposed development on behalf of Cardiff City Football ground (Fasham, P, 2003).

The report surmised that the impact on the historic landscape was considered to be slight, and that the impact was assessed as Not Significant. There was potential in this area for further archaeological sites, features and possible environmental indicators within the alluvium below the existing made ground. However, it was considered that the proposed development was unlikely to have much impact on any archaeological deposits.

Another desk-based assessment (E004860) was conducted 800m southwest of Leckwith Bridge, (00134S/ GM014/ LB13748/ LB26487/ 24126) for a proposed golf club development (Locock, M, 1995).

The report surmised that if the development was to proceed, there would be a significant impact on the archaeological resource and to exclude the Bronze Age barrow (00073s) from any landscaping proposals, if this was not possible, that a mitigation programme of excavation was necessary. It was also concluded that a watching brief was to be undertaken during the course of any ground works. It was deemed unlikely that development would affect the setting of the Scheduled Monuments in the vicinity.

Three larger-scale studies encompassing this area have been carried out, E005431 - the Rural Settlement of Roman Britain project (Smith *et al* 2016), E005443 - a predictive model of Early-medieval settlement locations in Wales (Seaman 2010) and E006100, a series of Rapid Coastline Zone Assessments however, none have any significant impact within the proposed development area.

Review of Cartographic, Aerial and Documentary Resources

The following review section has concentrated on sites located within the proposed development area.

Cartographic review

Vale of Glamorgan 1645 Map

The earliest map reviewed was a general map of 1645 of the vale of Glamorgan showing principal towns and rivers but otherwise minimal topographic details, however it does depict the river and bridge next to 'Leckwith' (Old Maps Online <u>www.oldmapsonline.org</u> (Accessed July 2019)).

Cefn Mably Estates of 1767

A 1767 map of the estates of Cefn Mably (GROD-DPeE2/9 (43)) depicts a number of land parcels and roads but with little information.

Bute's Glamorgan estates of 1824

Plan No. 17 (Several Farms in the Parish of Lequeth) of the survey of the Marquis of Bute's Glamorgan estates of 1824 (GRODB/E/I (17)) (Plate 1) shows the river Ely and fields to the west of the river. The road to Cardiff from Lequeth Village and over Lequeth Bridge is clearly visible and it separates the fields from the woods on the west. A building named Bridge Farm is depicted just north of and immediately off the road as the road bends to the northeast and over Lequeth Bridge. It is likely that the fields now in the proposed development area were once in the ownership of or tenanted by the farm. Just over the bridge on the east side of the river and adjacent to the south side of the road there is a small unnamed structure. It is of interest to note the earlier spelling of Lequeth in comparison to the accepted spelling of Leckwith today.

Parish of Landough, Cogan and Leckwith Tithe Map (1841)

The Tithe Map from 1841 shows a road leading to a bridge over the River Ely. A wide swathe of land annotated as the Ely Branch of the Taff Vale Railway is seen within land parcel (375a) and the route runs broadly parallel to the western bank of the River, across the proposed development area. West of the railway are woods (375) part of which was likely taken for the railway. There are small pastures between the road and winding river seen within parcels (312a, 312, 313a, 313, 314a, 314, 316): the addition of an 'a' suffix to some parcel numbers is indicative of some larger fields being divided into two by the route of the railway. The only buildings are the Cardiff Arms Public House in parcel (315) situated to the west of the road on the western side of the bridge crossing, and a cottage, seen within parcel (325) to the east of the road on the eastern side of the bridge crossing; the public house was originally the Bridge farm of 1824, and the unnamed structure now named as a cottage. There is a meadow next to the cottage, seen within parcel 324 which is part of the striking feature of extensive rectangular parcels related to water management and engineered reens on the east side of the river. Just outside of the proposed development area to the southwest at the foot of the woodland is a parcel of land numbered 311 which is recorded in the apportionment as 'fullingmill' garden possibly referring to woollen clothmaking (National Library of Wales. Welsh Tithe Maps -Places of Wales accessed Aug 2019).

First edition (1880) Ordnance Survey map (Figure 2)

The 1st edition OS map of 1880 depicts far greater detail than any previous mapping but essentially the layout is similar except for the railway shown on the tithe, which 39 years on is

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largely absent apart from some of its probable boundaries and woodland/scrub appears to have taken over. Leckwith Bridge is named and the original Bridge House (Cardiff Arms Public House on Tithe) has been extended since the date of the tithe and the area is now called 'Leckwithbridge': this is probably no longer a public house. The cottage seen on the tithe map is still extant on the east side of the river. An old weir is shown on the river in the northwest extension of the proposed development area, north of a small island. The pasture is overgrown in parts, with a line of wood and scrub from north to south on the south side of the river. There is a section of embankment shown along one edge of the river course, probably related to the line of the railway route. Just north of the old weir, the map indicates the 'Highest point ordinary tides'. The road to Cardiff follows the same route as earlier mapping, and a milestone indicates distances to Ely Station, Cardiff and Leckwith. On the western edge of the proposed development area in the woods (Coed Cati-Rosser), there were significant quarry workings named Leckwith Bolton Quarry but labelled as 'disused'; these quarries have not been depicted on earlier mapping. Of significance is that there are two trackways (haulage routes) leading from/to the quarry toward an 'Old Limekiln' and another building. These are within the proposed development area and no doubt the quarry used the road as the main transport route for its product. In addition, to Coed Cati-Rosser the woods to the north, named as Company's Wood, may reflect the quarrying operation. To the southern boundary and again on the west of the proposed development, 'Factory Wood' is annotated which may also allude to a manufacturing process.

Second edition (1901) Ordnance Survey map (Figure 3)

There is little change from the first edition to the 2nd edition OS map of 1901. The river is unchanged and the road follows the same route but the milestone now only mentions Ely Station and Cardiff. There is no change to the woodlands except that the quarry haul routes are not shown but the 'Old limekiln' is extant. The main building in the site area is annotated as 'Leckwith Bridge House' and it appears to be slightly different from the earlier map: A division is clear indicating two separate properties, which probably resulted in alterations to the building. A building although outside just outside of the area of interest in Factory Wood is annotated as The Factory.

Third edition (1919) Ordnance Survey map (Figure 4)

No significant changes can be seen within the area by the publication of the 3rd edition OS map of 1919. Leckwith Bridge House has undergone further small alterations to its floorplan. The river and road follow the same routes and the woodlands/vegetation and milestone are unchanged.

Fourth edition (1950/51) Ordnance Survey map (Figure 5)

The 4th edition OS map shows a significant change with the introduction of a new road (annotated A4055), bridge and viaduct and associated earthworks constructed (1930s) to the east of the original road with the new bridge immediately adjacent to the old bridge. The original road outside Leckwith Bridge House has been terminated to the south and access to and from the building now appears to be via the old bridge. Leckwith Bridge House has been further subdivided along its northern side and other small alterations are shown. The milestone is no longer shown and may have been removed during the road construction works. No changes are noted to the woodlands to the west and the cottage on the east bank of the river appears unaffected by the new road. Allotment gardens make an appearance on the east side of the river lying between the river edge and the square-shaped water management fields; these may have been a wartime (1939-1945) measure as they can be seen on a 1946 aerial

photograph. All map editions consulted following on from the tithe retain the water management features on the east of the river.

Aerial Photography

The earliest aerial photograph dating from 1946 (see Appendix 3, Table 6.) clearly shows the proposed development area both old and new bridges and Leckwith Bridge House as two properties; the area to the rear of them appears to be largely scrub (Plate 19). The river to the south of the bridges meanders whilst to the north of the bridges it is straight. The cottage on the east bank is present as are allotment gardens along the river bank to the south of the bridges.

Little change can be seen through the 1960s photography except for new buildings constructed one immediately behind Leckwith Bridge House, and another large and longer building adjacent (industrial units) to the river on its west side further behind the houses again; by the late 60's a number of probable containers are also positioned near these buildings. The allotments closest to the bridges are no longer apparent and the old square field system on the east side of the river is under development with a number of large units visible (1968 6852 58 RAF 8659 F42 0068)

Between the late 70s through to 2000, the industrial units are prominent and this activity has extended to the south side of the bridges. The land on the eastern side of the river is now well developed and between 1981 and 1991 the cottage (LQ003) was likely demolished to make way for the roundabout that is still used today.

Lidar Survey

The only feature visible on the lidar survey is the natural route of the River Ely prior to the forcible route change.

Documentary

The documentary sources available at the Glamorgan Record Office revealed no new sites of interest, but enhanced the understanding of the sites within the proposed development area. Three documents are referenced.

GRO.C/C/RB/P/52.

A 1933 contract plan of Cardiff to Penarth (Plate 2) showed, in detail, the construction plans of the viaduct adjoined proposed new bridge over Ely River at Leckwith. The plans depicted detailed annotated drawings of the entire bridge, along with measurements in feet and inches, along with height in meters O.D.

GRO.DXCT/9/1

A 1952-1973 photograph showing the old Leckwith bridge (Plate 3) taken from the east bank, facing west. The photo showed the north facing side of the bridge, showing the difference in the three bridge abutments, with the eastern most a more angular shaped abutment, and the adjacent two as more the typical rounded abutments.

GRO. (DA/15/1-56)

A document (1824) could not be easily read but the detail stated that both Leckwith Bridge and Limekiln were both in need of repair. This is probably the 'old limekiln' depicted on the OS first edition map (Figure 2).

Walkover Survey

A walkover survey was conducted on 12th July 2019 in fair weather, during which the proposed development area was photographed. Sites previously identified from a search of the regional Historic Environment Record (HER) and National Monuments Record (NMR) were visited in order to assess their current condition. A sample of photographs (5-18) illustrating the current condition of the sites of archaeological interest can be seen in Appendix IV.

All sites within the development area were visited, assessed and photographed.

The area walked covered the entire industrial site, and the eastern edge of the Ancient Semi Natural Woodland (No 8117) and the northern edge of (14161). The north of the development area consisted of a concrete base, with a number of various small-scale industrial units, including a concrete supply works, and scrapped cars. Similarly, to the south of the development area, the area was concreted over with a few scattered buildings and a number of cars, and a small jetty was seen running down to the River Ely. The southern end of the development area overgrown with brush and trees, made a full walkover difficult. The Ancient Semi Natural Woodland (No 8117) to the west namely Company's Wood and Factory Wood was generally rising in height to the west and heavily wooded, whilst (14161) was generally flat. The two bridges (Leckwith Bridge (00134s/GM014/LB13748/LB26487/24126) and Leckwith New Bridge (307689) were open to both pedestrians and vehicles, the new bridge sustaining a fair amount of traffic, whilst the smaller Leckwith Bridge only allowed for a few smaller work vehicles to cross. Leckwith Bridge House (LQ001) was occupied but showed signs of disrepair. Another new site (Drain cover LQ005) was also encountered during the course of the walkover.

Views from Leckwith Bridge (00134s/GM014/LB13748/LB26487/24126) towards the development area, and views from the development area to the bridge were assessed. Views from the development area towards the Registered Park and Gardens Thompson's Park (Sir Davids Field) (PGW (Gm) 71) and Fairwood House (PGW (Gm) 73) were also assessed in order to inform on potential impact.

Archaeological Interests

There are 42 sites of archaeological interest identified within the study area of 750m around the proposed development site centred on NGR ST 15884 75224 (Figure 1, Table 1, Appendix V and VI).

Five digit numbers with a letter suffix (s) are Primary Record Numbers (PRNs) recorded in the regional HER. Five or six figure numbers without a letter suffix are National Primary Record Numbers (NPRNs) of the NMR, as supplied by the RCAHMW. A prefix of 'GM' indicates a Scheduled Monument and Listed Buildings are prefixed 'LB', as supplied to the HER by Cadw. Numbers with a 'LQ' prefix were new sites identified during the present assessment.

NO.	ID	Site Name	Туре	Period	NGR	Status
1	00074S	Findspot	Hoard	Bronze age	ST1674	
2	00134S/GM014//24126	Leckwith bridge	Bridge	Medieval	ST15907524	Scheduled monument
	LB13748/LB26487					& Listed building
3	00142S	Leckwith flats	Coin	Roman	ST166755	
4	00742S	St James's church at Leckwith	Church	Medieval	ST15797440	
5	01516S	Late bronze age-iron age hoard	Hoard	Bronze age	ST165755	
6	01605S/113	Ynyston farm	Farm	Medieval	ST16167453	
7	01929S	Remains of dam	Dam	Medieval	ST1623474064	
8	03238S	Leckwith top engine house,	Engine house	Post-medieval	ST15847420	
9	032398	Leckwith top limekiln, Michaelston	Lime kiln	Post-medieval	ST15797421	
10	03240S	Leckwith top quarry, Michaelston	Quarry	Post-medieval	ST15837424	
11	037798	Leckwith churchyard	Churchyard	Medieval	ST15797440	
12	03791S	Leckwith	Place name	Early medieval	ST15797440	
13	04119S	Leckwith bottom quarry	Quarry	Unknown	ST15777497	
14	04120S	Lime kiln	Lime kiln	Post-medieval	ST1585875115	
15	04121S	Structure	Structure	Unknown	ST1583675104	
16	041228	Two structures	Structure	Unknown	ST1585975125	
17	04123S	Well	Well	Unknown	ST1590074796	
18	04124S	Clay pit	Clay pit	Post-medieval	ST1489675421	
19	041258	Clay pit	Clay pit	Post-medieval	ST1499875657	
20	04126S	Llandaff and Dinas Powys sewage works	Sewage works	Post-medieval	ST1525375817	
21	04128S	Quarry in factory wood	Quarry	Post-medieval	ST161746	

Table 1: Identified archaeological interests within Study

NO.	ID	Site Name	Туре	Period	NGR	Status	
22	04167S	Barrage balloon mooring point, Lawrenny Avenue, Cardiff	Mooring bollard	Modern	ST1576875909		
23	04321S	Clay pit, Plymouth wood	Clay pit	Post-medieval	ST1497975642		
24	043228	Clay pit	Clay pit	Post-medieval	ST1489975430		
25	050368	Ninian Park section, 3rd western general hospital, Cardiff	Military hospital	Modern	ST167757		
26	050518	Landsdowne road section, 3rd western general hospital, Cardiff	Hospital	Modern	ST1570176081		
27	051528	Miles Master mk iii w8698 crash site					
28	054598	Lodge, Lansdowne hospital					
29	05615S	Building in factory wood, east of Leckwith					
30	414921	Cardiff City stadium					
31	400204	Ynyston farm, barn	Farm	Post-medieval	ST16167449		
32	400193	Old rectory, Leckwith	Rectory	Post-medieval	ST15797434		
33	307689	Leckwith new bridge and viaduct, Leckwith, Cardiff	Bridge	Modern	ST15927523		
34	270537	Cube, Cardiff	Military	Modern	ST168744		
35	9312	St John's	Church	Post-medieval	ST1676		
36	265819	Woodlands, garden, Cardiff	Shop	Post-medieval	ST1581474722		
37	419538	Wholesale fruit centre; Bessemer Road market, Bessemer Road, Leckwith moors, Cardiff		Modern	ST1689074830		
38	LQ001	Leckwith bridge house	Public house	Unknown	ST1585975203		
39	LQ002	Old weir	Weir	Unknown	ST1582375267		
40	LQ003	Rectangular structure	Structure	Post medieval	ST1595675280		
41	LQ004	Milestone	Milestone	Post medieval	ST1595675280		
42	LQ005	Drain coverDr	Drain cover	Post medieval	ST1584075267		

Assessment of Potential Impacts

Direct effect of the development on archaeological sites

Tuble 2. The uncer effect of the ucveropment on urchaeological meetests	Table 2: The direct effect of the development on archaeological interest	S
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ID	Site Name	Туре	Period	Condition	Status	Value	Rarity	Group Association	Historical Association	Confidence	Effect
00134S/GM014/LB 13748/LB26487/24 126	Leckwith Bridge	Bridge	Medieval	Intact	LB/SAM	A	Medium	Medium	Unknown	Medium	Minor
04120S	Lime kiln	Limekiln	Post medieval	Near destroyed	-	D	Low	Low	Unknown	Low	Moderate
04122S	Two structures	Structure	Post medieval	Near destroyed	-	D	Low	Low	Unknown	Low	Moderate
04125s	Structure	Structure	Post medieval	Near destroyed	-	D	Low	Low	Unknown	Low	Moderate
307689	Leckwith New Bridge and Viaduct, Leckwith, Cardiff	Bridge	Modern	Not known	-	D	Low	Low	Unknown	Low	Major
LQ001	Leckwith bridge house	Bridge	Unknown	Intact	_	С	Low	Low	Unknown	Medium	Major
LQ002	Old weir	Weir	Unknown	Near destroyed	-	D	Low	Low	Unknown	Low	Moderate
LQ003	Structures (possible cottage)	Structure	Post medieval	Post medieval	-	D	Low	Low	Unknown	Low	Moderate
LQ004	Milestone	Milestone	Post medieval	Intact	-	Е	Low	Low	Unknown	Medium	Moderate
LQ005	Drain cover	Drain	Post medieval	Near destroyed	_	D	Low	Low	Unknown	Medium	Moderate

There is some potential for the development to have a major effect on unknown archaeological remains.

Justification of assessment *Direct Effects*

The works were considered as having a 'Major' effect on two sites of archaeological interest within the development area, Leckwith Bridge House (LQ001) and Leckwith New Bridge and Viaduct (307689).

The effect of the development on Leckwith Bridge House was assessed as being 'Major' as the full extent of the development plans are unknown, and that there is the possibility of demolition/alteration. There is also no firm indication of date of construction of this building, other than being at least 1841, as shown on the tithe map.

The effect of the development Leckwith New Bridge and Viaduct (307689) was assessed as being 'Major' as the current development plans require full demolition of the feature. Furthermore, this feature was built in and around 1933, and represents an architectural feature of this time.

A 'Minor' effect has been attributed to the sites of Two Structures (04122s), Structure (04125s), Limekiln (04120s), Old Weir (LQ002), Structure (Possible Cottage) (LQ003), Milestone (LQ004), and Drain cover (LQ005) as these sites has since faced extensive redevelopment, have been moved or have been left overgrown. However, no full archaeological record of these exits, and so mitigation would allow for the record of these to be enhanced.

The Two Structures (04122s) and Structure (04125s) have no further information other than being noted on the 1st Edition Mapping, and so possibly suggests that these are earlier in date, similarly the Structure (Possible Cottage) (LQ003) and Old Weir (LQ002). The Limekiln (04120s) is also visible from the 1st Edition OS mapping, and suggests links with the Leckwith Bolton Quarry to the south, interconnected by a number of tramways and trackways. Within a historical context, as Drain cover (LQ005) is labelled at 'Drain Cardiff Sewers 1857', this may be reflected by the Board of Health survey of Cardiff.

Any other unknown archaeological sites would also be mitigated against by an archaeological watching brief, including the potential for buried and waterlogged archaeological and environmental deposits and artefacts due to the recurrent phases of inundation and alluviation., reflecting the landscape of the nearby HLW (Gt) 2 Gwent Levels

An effect of 'Minor' has been attributed to the site of Leckwith Bridge (00134s/GM014/LB13748/LB26487/24126), as this it a Scheduled Monument and is not being affected by the development under current development proposals. However, features associated with the bridge may be encountered during the development works.

Indirect effect of the development on archaeological sites and landscapes

In addition to the potential direct effects the development may have on the archaeological resource of the area, an assessment of the indirect effect on nearby sites of regional and national importance was conducted

ID	Name	NGR	Туре	Period	Status	Nature of Effect/ Effect
00134s/GM014/LB13748/LB2 6487/24126	Leckwith Bridge	ST15907524	Bridge	Medieval	SM/LB II	Considerable
PGW (GM 71)	Thompson's Park (Sir David's Field)	ST13837873	Registered Park and Garden	Post medieval	Registered Park and Garden	Very Slight
PGW (GM 73)	Fairwood House, Cardiff	ST16117708	Registered Park and Garden	Post medieval	Registered Park and Garden	Very Slight

Table 3: Sites identified for assessment of indirect effect

Justification of assessment Indirect Affects

An effect of 'Considerable' was assigned to the site of Leckwith Bridge (00134s/ GM014/ LB13748/ LB26487/ 24126), due to the relatively flat nature of the development area, and the close proximity of the bridge to the proposed developments. However, it must also be noted that previous development has occurred immediately surrounding the bridge, most notably in the form of the Leckwith New Bridge and Viaduct (307689), forming the road, so the setting of the bridge has been previously compromised.

An effect of 'very slight' was assessed for Thompson's Park (Sir Davids Field) (PGW (Gm) 71) and Fairwood House (PGW (Gm) 73, as both sites are a considerable distance away from the development area, 3850m and 1598m, respectively. The development area is also situated within a relatively flat area, at a height of 15 to 30m OD, and is bordered by trees, the Ancient Semi Natural Woodland (Nos 8117 and 14161) to the west and south respectively, generally obscuring any views to or from the development area.

9.1. Mitigation Measures

It is considered that the proposed works will have a 'Major' effect on two sites of archaeological interest within the development area, Leckwith Bridge House (LQ001 and Leckwith New Bridge and Viaduct (307689).

A 'Minor' effect has been considered on the sites of Leckwith Bridge (00134s/GM014/LB13748/LB26487/24126), Two Structures (04122S), Structure (04125s), Limekiln (04120s), Old Weir (LQ002), Structure (Possible Cottage) (LQ003), Milestone (LQ004), and Drain (LQ005).

The effect of potential development on sites Leckwith Bridge (00134s/ GM014/ LB13748/ LB26487/24126), Two Structures (04122S), Structure (04125s), Limekiln (04120s), Old Weir (LQ002), Structure (Possible Cottage) (LQ003), Milestone (LQ004), and Drain (LQ005) should be mitigated by means of an archaeological watching brief.

The effect of the proposed development on Leckwith Bridge House (LQ001) should be mitigated by means of a Level 3 building survey and photographic building survey.

The effect of the development on Leckwith New Bridge and Viaduct (307689) and Drain (LQ005) should be mitigated by means of a photographic survey.

As the proposed development encompasses the Scheduled Monument and Listed Building Leckwith Bridge (00134S/GM014/LB13748/LB26487/24126), and falls just outside of the significant viewing lines of Thompson's Park (Sir Davids Field) (PGW (Gm) 71) and Fairwood House (PGW (Gm) 73), it is advised that Cadw is consulted to obtain their advice on the setting of these assets.

Provided that the mitigation recommendation is followed, and in lieu of any further detailed construction plans, including any contingencies, then it should be possible to reduce the effect of any proposed the development on the archaeological resource.

ID	Name	Effect	Archaeological mitigation recommended
3047689	Leckwith New	Major	Photographic record prior to demolition
	Bridge and Viaduct		Preservation in situ where possible, preservation by record if not.
LQ001	Leckwith Bridge House	Major	Level 3 Building Survey dependant of design of proposed development.
			Archaeological watching brief. Preservation in situ where possible, preservation by record if not.
00134S/GM	Leckwith Bridge	Minor	CADW to be consulted before any development works.
014/LB1374 8/LB26487/ 24126			Archaeological watching brief. Preservation in situ where possible, preservation by record if not.
04120s	Lime Kiln	Minor	Archaeological watching brief.
			Preservation in situ where possible, preservation by record if not.
04122s	Two structures	Minor	Archaeological watching brief.
			Preservation in situ where possible, preservation by record if not.
04125s	Structure	Minor	Archaeological watching brief
			Preservation in situ where possible, preservation by record if not.
LQ002	Old Weir	Minor	Archaeological watching brief.
			Preservation in situ where possible, preservation by record if not.
LQ003	Cottage site	Minor	Archaeological watching brief.
			Preservation in situ where possible, preservation by record if not.

 Table 4: Table of Recommended Mitigation

Leckwith Quay, Cardiff and Vale of Glamorgan: archaeological desk-based assessment

ID	Name	Effect	Archaeological mitigation recommended
LQ004	Milestone	Minor	Archaeological watching brief.
			Preservation in situ where possible, preservation by record if not.
LQ005	Drain	Minor	Photographic Survey dependant of design of proposed development
			Archaeological watching brief. Preservation in situ where possible, preservation by record if not.
PGW (Gm 71)	Thompson's Park (Sir Davids Field)		CADW to be consulted before any development works
(PGW (Gm 73)	Fairwood House		CADW to be consulted before any development works
-	Unknown archaeological sites		An archaeological watching brief. Preservation in situ where possible, preservation by record if not.

Bibliography

Fasham, P, 2003, Cardiff City Football Ground: Land at Leckwith Cultural Heritage Assessment

Locock, M, 1995, Archaeological Desk-Based Assessment Leckwith Golf Course, South Glamorgan, GGAT Report 95/058

Pugh, T,B, 1971, Glamorgan County History. Volume 3

Rippon, S, 1996, Gwent Levels: The Evolution of a Wetland Landscape, CBA Research Report 105

Roberts, R, 2018, GGAT 150 Rapid Coastline Zone Assessment

Seaman, A.: 2010: towards a predictive model of early medieval settlement location: a case study from the Vale of Glamorgan

Smith, A, Martyn, A, Brindle, T, Fulford, M, 2016, *New Visions of the Countryside of Roman Britain: Volume 1: The Rural Settlement of Roman Britain*, Britannia Monograph No 29. Society for the Promotion of Roman studies.

Thomas, H, M, A catalogue of Glamorgan estate maps, Cardiff, 1992

Williams, F,M, Glamorgan County History, Vol. 4: *Early Modern Glamorgan from the Act of Union to the Industrial Revolution* Hardcover– 1974

Websites

British Geological Survey <u>http://www.bgs.ac.uk/</u> (Viewed July 2019)

LANDMAP data https://landmap-maps.naturalresources.wales (Viewed August 2019)

Old Maps Online <u>www.oldmapsonline.org</u> (Viewed July 2019)

National Library of Wales. https://places.library.wales/browse/51.461/-3.214/16?page=1&alt=&parish_facet%5B%5D=Llandough%2C+Cogan+and+Leckwith (accessed Aug 2019)

Cartographic sources

Ordnance Survey 1:2500, 1880, First Edition

Ordnance Survey 1:2500, 1901, Second Edition

Ordnance Survey 1:2500, 1919, Third Edition

Ordnance Survey 1:2500, 1941, Fourth Edition

1841 Tithe Map of the parish of Landough, Cogan and Leckwith

GRODB/E/I (17) (1824) Survey of marquis of Bute's Glamorgan estates, by David Stewart

GROD/DPeE2/9 (43) (1767) Plans of the estates of Cefn Mably

(1645) Glamorganensis comitatvs; vulgo Glamorgan Shire (Old Maps Online www.oldmapsonline.org (accessed July 2019))

Documentary Sources

C/C/RB/P/52 (1933) Contract plans: Cardiff to Penarth. Construction of viaduct adjoined proposed new bridge over Ely river at Leckwith

Leckwith Quay, Cardiff and Vale of Glamorgan: archaeological desk-based assessment

DXCT/9/1 (1952-1973) Photograph showing the old Leckwith bridge, taken from the east bank, facing west DA/15/1-56 (1824) Correspondence stating Leckwith Bridge and Lingkiln were both in need

DA/15/1-56 (1824) Correspondence stating Leckwith Bridge and Limekiln were both in need of repair

Statutory documents

Ancient Monument and Archaeological Areas Act 1979

Conservation Principles for the sustainable management of the historic environment in Wales (Cadw) 2011

Design Manual for Roads and Bridges Cultural Heritage (2007).

Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process (2nd Edition, Cadw) 2007

Historic Environment (Wales) Act 2018

- LDP: Cardiff Local Development Plan 2006-2026 (Adopted Plan) January 2016
- LDP: Vale of Glamorgan Local Development Plan 2011-2026 (Written Statement) June 2017
- Planning (Listed Buildings & Conservation Areas) Act 1990

Planning Policy Wales (PPW) Chapter 6 The Historic Environment, Edition 2010 (2018)

- Review of the Hedgerow Regulations 1997 (1998)
- Standards and Guidance for Historic Environment Desk-based Assessments (Chartered Institute for Archaeologists) 2017

The Environment Act 1995

The Government's response to the Environment, Transport and Regional Affairs Committee's Report 'The Protection of Field Boundaries' 1999

The Hedgerow Regulations 1997 A Guide to the Law and Good Practice

Technical Advice Note (TAN) 24: The Historic Environment (2017)

Vale of Glamorgan LANDMAP Historic Landscape of Leckwith and Cwm Cydfin (VLFGLHL025)

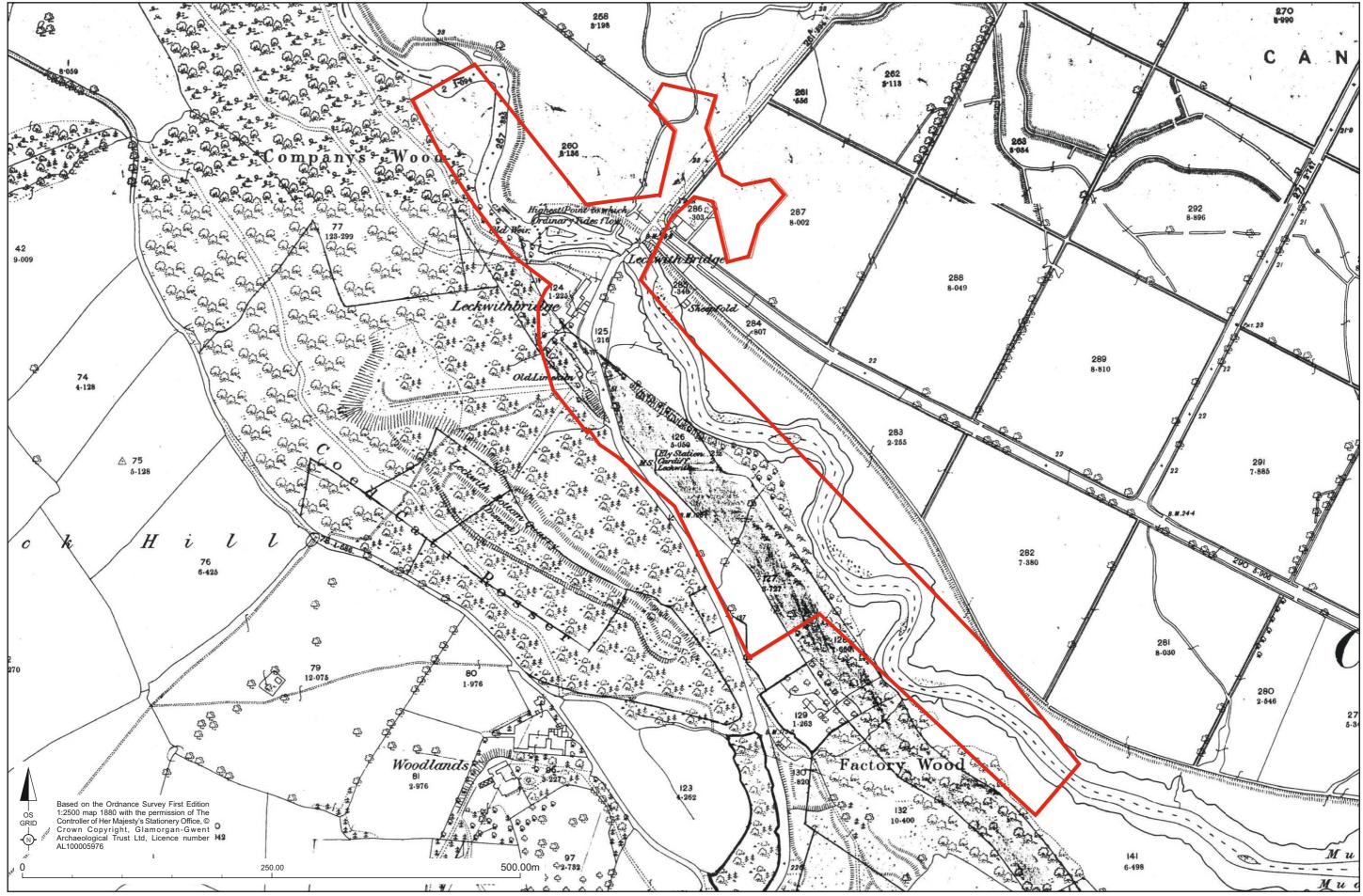


Figure 2. First Edition Map (1880) showing the development area (red).

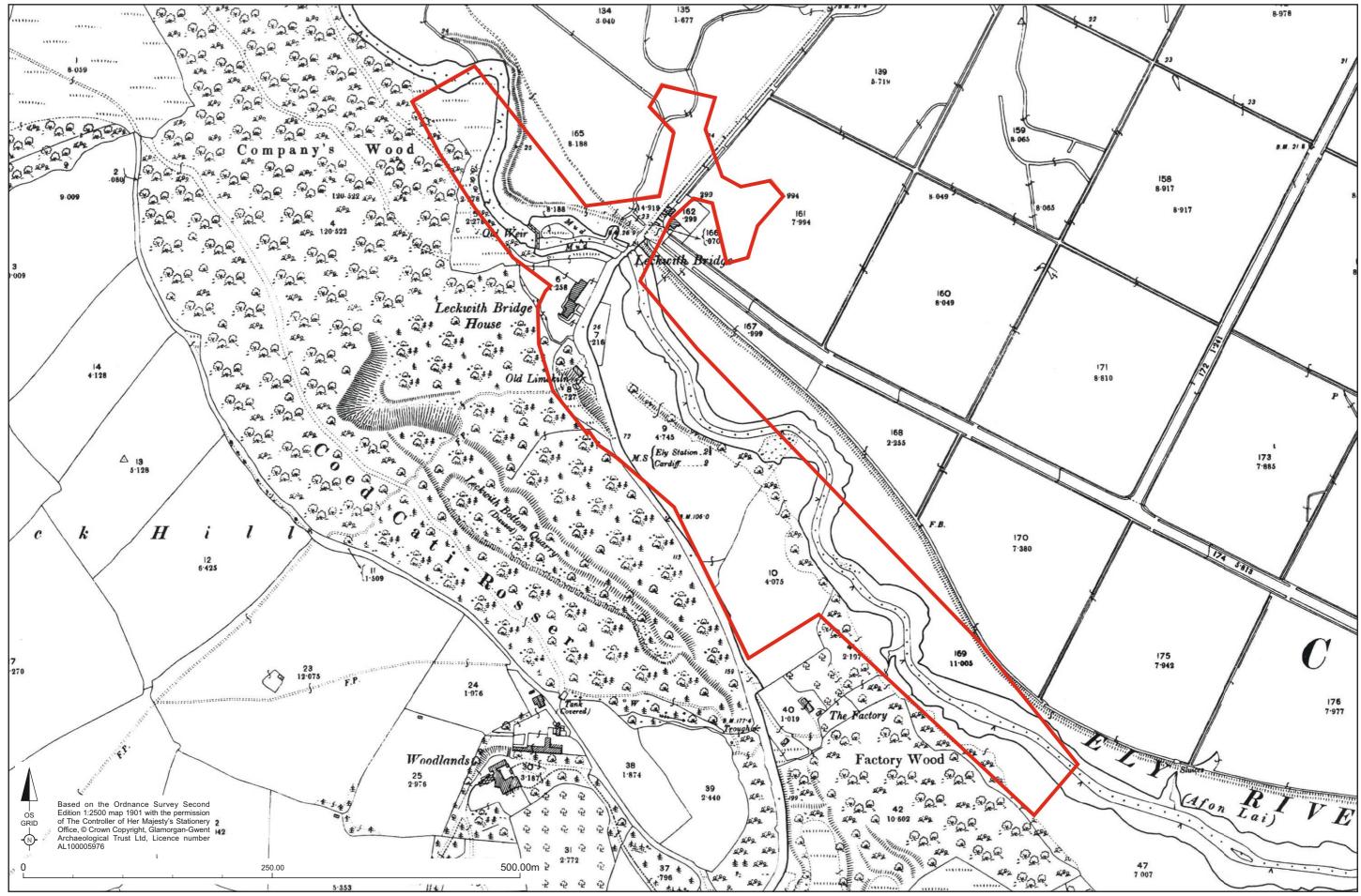


Figure 3. Second Edition Map (1901) showing the development area (red).

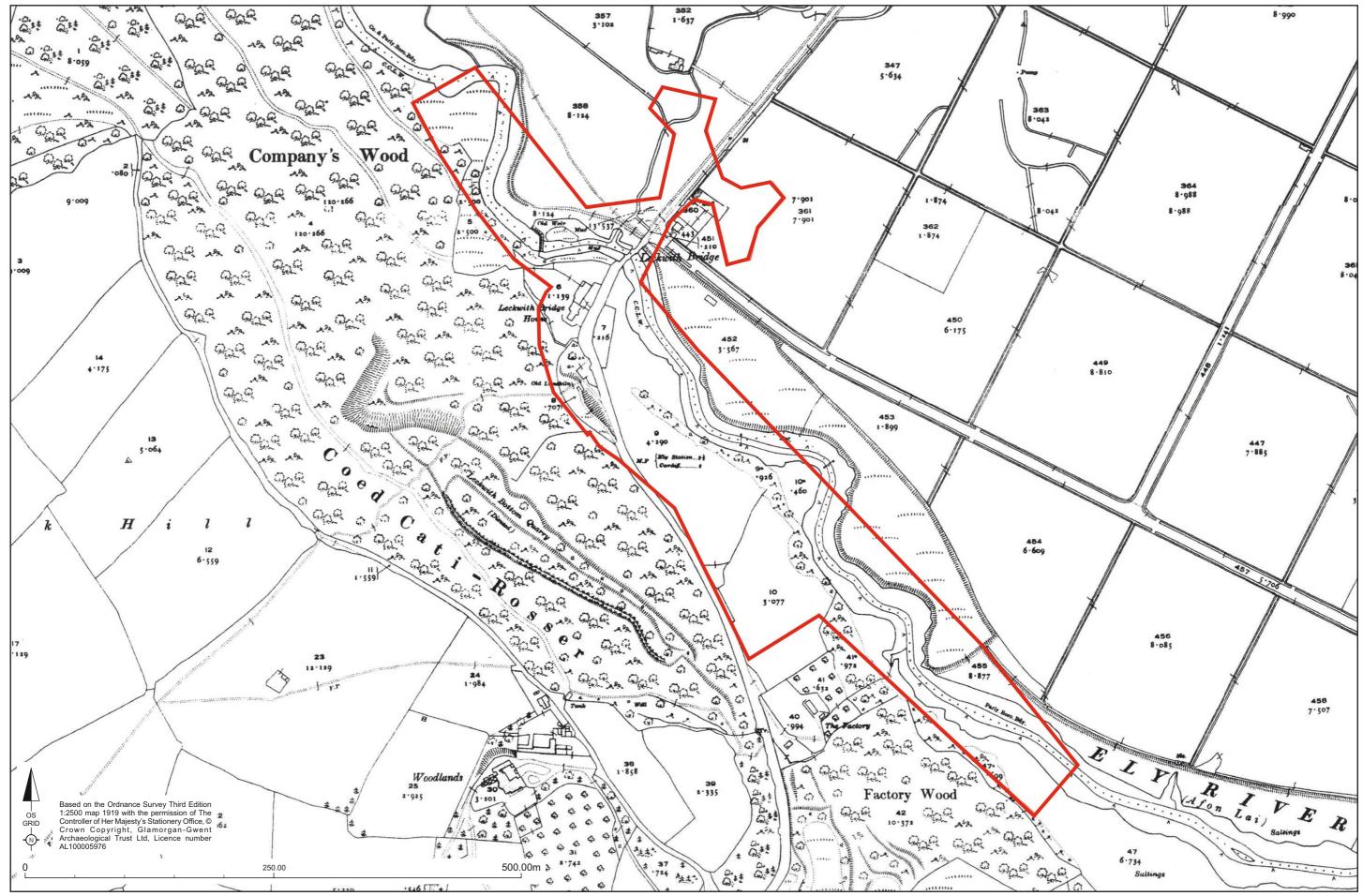


Figure 4. Third Edition Map (1919) showing the development area (red).

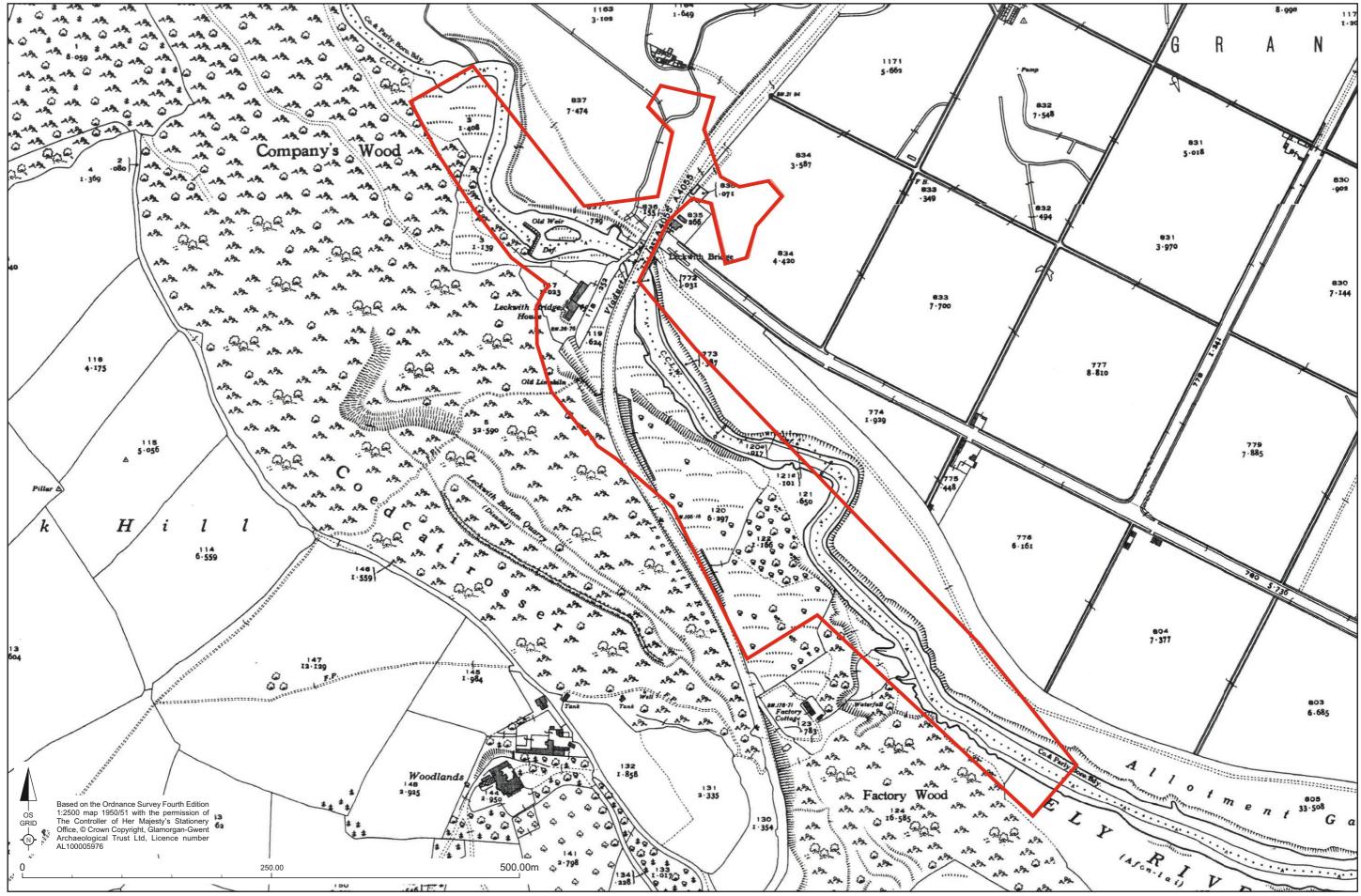


Figure 5. Fourth Edition Map (1941) showing the development area (red).

Appendix II. Tithe Apportionment

Table 5: Apportionment for the Tithe of the Parish of Landough, Cogan and Leckwith

Parcel Number	Landowners	Occupiers	Name and Description of Lands and Premises	State of Cultivation	Quantities in Statute Measure		
					А.	R.	Р.
312a	Bute Marquess	Jenkins	-	Pasture	1		8
	of	Lewis					
312	Bute Marquess	Jenkins	-	Pasture	2	1	6
	of	Lewis					
313	Bute Marquess	Jenkins	-	Pasture	1	1	
	of	Lewis					
314	Bute Marquess	Rimron	-	Pasture	1	1	6
	of	Nicholas					
314a	Bute Marquess	Rimron	-	Pasture	1	3	27
	of	Nicholas					
315	Bute Marquess	Rimron	Cardiff Arms Public	Pasture	1	2	16
	of	Nicholas	House				
316	Bute Marquess	Rimron	-	Pasture	1	3	23
	of	Nicholas					
317	Bute Marquess	Rimron	-	Meadow	7	3	31
	of	Nicholas					
324	Bute Marquess	In hand	-	Meadow	8		6
	of						
325	Bute Marquess	In hand	Cottage and garden	-		1	4
	of						
375a	Railway Taff	-	-	-	18	2	163
	Vale						

Appendix III: Aerial photographs with coverage of the allocation area

The following is a list of the aerial photographs with coverage of the study area held by the Central Registry of Air Photography for Wales (CRAPW). The table shows photographs available to view at the time of assessment (Enquiry reference: W AP PR 18-212).

Table 0: Aeriai r notographs availabl		
Ref	Photo Type	Date Flown
1946 4654 RAFCPEUK_1871 1071	B&W	04 December 1946
1948 4822 RAFCPEUK_2520 5253	B&W	23 March 1948
1948 4822 RAFCPEUK_2520 5283	B&W	23 March 1948
1948 4822 RAFCPEUK_2520 5309	B&W	23 March 1948
1950 13th July 5034 RAF540_378 P 101	B&W	13 July 1950
1950 13th July 5034 RAF540_378 P 101	B&W	13 July 1950
1956 1st May RAF82_1436 P 105	B&W	01 May 1956
1962 6213 58_5502 F21 0004	B&W	03 October 1962
1962 6209 F22 0099	B&W	02 May 1962
1962 6213 58_5502 F21 0078	B&W	03 October 1962
1966 6630 OS66_200 140	B&W	16 August 1966
1966 6630 OS66_200 141	B&W	16 August 1966
1968 6852 58_RAF_8659 F42 0068	B&W	18 March 1968
1971 7156 RAF39_3764 F42 043	B&W	17 September 1971
1971 7156 RAF39_3764 F44 020	B&W	1971
1979 22nd Sept OS79_129 099	B&W	22 September 1979
1981 8104 JAS3181 189	B&W	1981
1991 Geonex159_91 0245	Colour	1991
2000 Getmapping	Colour	2000

Table 6: Aerial Photographs available to view at the time of assessment

Appendix IV. Plates

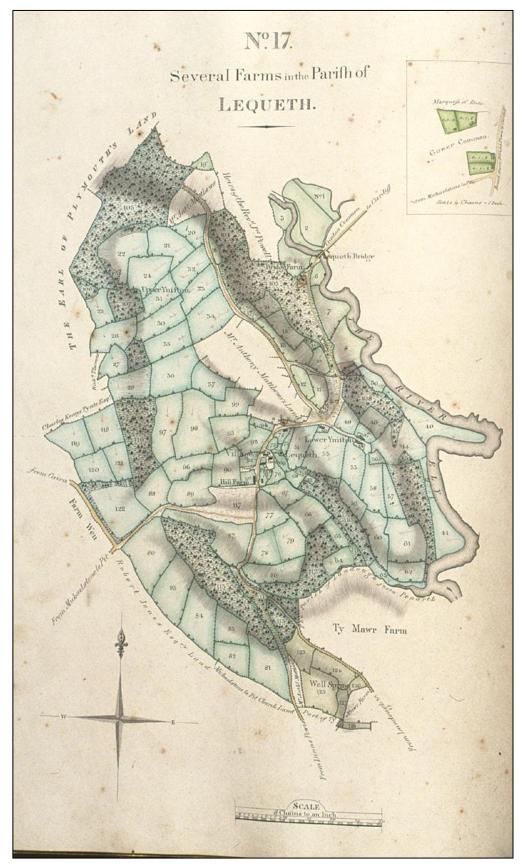


Plate 1. Marquis of Bute Glamorgan Estate Plans 1824

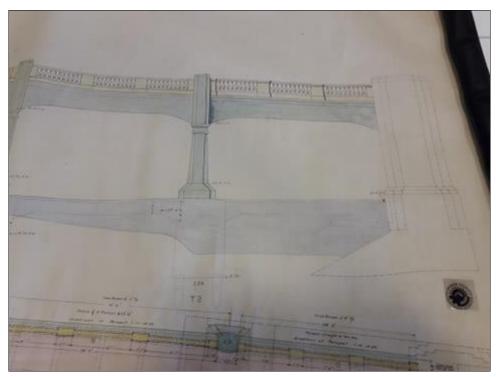


Plate 2. Extract from 1930s plans for the new bridge at Leckwith



Plate 3. Photograph of Leckwith Bridge (00134S/GM014/LB13748/LB26487/24126) to the west (1952-1973)



Plate 4. Development area to the south east



Plate 5. Development area to the north west



Plate 6. Eastern end of Leckwith Bridge 00134s/GM014/LB13748/LB26487/24126 (Scale: 0.5m divisions)



Plate 7. View of Leckwith Bridge 00134s/GM014/LB13748/LB26487/24126 from 307689 towards the north



Plate 8. View towards north of Leckwith Bridge House (LQ001)



Plate 9. View to south of north facing elevation of Leckwith Bridge House (LQ001) (Scale: 0.5m divisions)



Plate 10. View to south facing elevation of Leckwith Bridge House (LQ001)



Plate 11. Drain cover (LQ005) towards the east (Scale: 0.5m divisions)

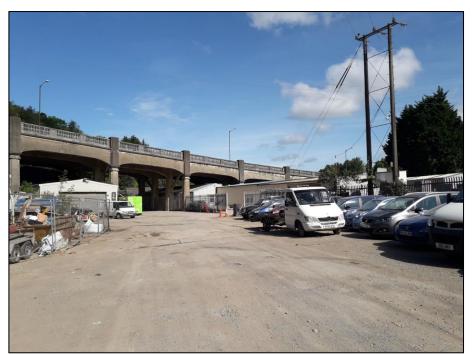


Plate 12. Leckwith New Bridge and Viaduct (307689) from south eastern end of development area to the northwest



Plate 13. Plaque seen on Leckwith New Bridge and Viaduct (307689), view to north west (Scale: 0.5m divisions)



Plate 14. Location of features (04122s), (04120s) and (LQ002) to the west (Scale: 0.5m divisions)



Plate 15. Location of Milestone (LQ004)



Plate 16. Former location of cottage LQ003, view to the east



Plate 17. View to the northwest and location of Old Weir LQ002



Plate 18. 1946 Aerial photograph extract (1946 4654 RAFCPEUK_1871 1071)

Appendix V: Historic Environment Record Sites Gazetteer

Enquiry 5769

ID 00074s **Name** Findspot **Type** Bronze Age, Hoard, Rank: 1 **NGR** ST1674 **Description** The date of the hoard is not hard to determine. All the types are exotic and late, while the razors at least have definite Hallstatt affinities. **Condition** Not known Year: 1977 **Status** None recorded **Rarity** rarity **Group Association** g_ass **Historical Association** h_ass **Confidence** con **Value** value **Effect** effect

ID 00134s **Name** Leckwith Bridge **Type** Medieval, Bridge, Rank: 1 **NGR** ST15907524 **Description** Leckwith Bridge has three arches, two being pointed with double arch-rings built in two orders, but the middle arch has been rebuilt. **Condition** Restored Year: 1977 **Status** Scheduled Monument GM014, listed building 13748 II* **Rarity** rarity **Group** Association g_ass Historical Association h_ass **Confidence** con **Value** value **Effect** effect

ID 00142s **Name** LECKWITH FLATS **Type** Roman, Coin, Rank: 1 **NGR** ST166755 **Description** A coin of Sestertius of Marcus Aurelius (AD 163-4) was found in top-soil above alluvial clay on Leckwith Flats. Now at the NMW. **Condition** Near intact Year: 1977 **Status** None recorded **Rarity** rarity **Group Association** g_ass **Historical Association** h_ass **Confidence** con **Value** value **Effect** effect

ID 00742s Name ST JAMES'S CHURCH AT LECKWITH Type Medieval, Church, Rank: 1 NGR ST15797440 Description St James' Church, rebuilt in 1867 on site of Medieval church. Abandoned and gutted in 1978. Only surviving relic of old church is a small memorial tablet of 1787 EARLIEST DATE? Evans 2003: GGAT 73 Early-Medieval Ecclesiastical Sites Project database Condition Not known Year: 2004 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 01516s **Name** LATE BRONZE AGE-IRON AGE HOARD **Type** Bronze Age, Hoard, Rank: 1 **NGR** ST165755 **Description** A hoard of Late Bronze Age - Iron Age date was found in 1928 on the flood plain of the Rivers Ely & Taff in a shallow bed of river sand. Finds include two socketed axes, four socketed chisels, two sickles, two razors and the cap of a chariot-pole. Now at the NMW.

Condition Moved Year: 1981

Status None recorded **Rarity** rarity **Group Association** g_ass **Historical Association** h_ass **Confidence** con **Value** value **Effect** effect

ID 01605s Name YNYSTON FARM Type Medieval, Farm, Rank: 1 NGR ST16167453 Description Lateral chimney with adjacent winding stair; broad- chamfered ceiling beams. Condition Restored Year: 1986 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 01929s Name Remains of Dam Type Medieval, Dam, Rank: 1 NGR ST1623474064 Description Remains of dam aligned NE.-SW. in bottom of steep-side ravine. Dam formed by dumping & scarping across ravine in order to form deep pond to the north. Recorded in RCAHMW Vol. 3, part 2, page 381. Condition Destroyed Year: 1983 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 03238s **Name** LECKWITH TOP ENGINE HOUSE, **Type** Post-Medieval, Engine house, Rank: 1 **NGR** ST15847420 **Description** Location of engine house at Leckwith Top, as noted from the OS 1880 First Edition Map. (01) **Condition** Not known Year: 2004 **Status** None recorded **Rarity** rarity **Group Association** g_ass **Historical Association** h_ass **Confidence** con **Value** value **Effect** effect

ID 03239s **Name** Leckwith Top Limekiln, Michaelston **Type** Post-Medieval, Lime kiln, Rank: 1 **NGR** ST15797421 **Description** Site of lime kiln on Leckwith Top, as noted from the OS 1880 First Edition Map. (01) **Condition** Not known Year: 2004 **Status** None recorded **Rarity** rarity **Group Association** g_ass **Historical Association** h_ass **Confidence** con **Value** value **Effect** effect

ID 03240s **Name** Leckwith Top Quarry, Michaelston **Type** Post-Medieval, Quarry, Rank: 1 **NGR** ST15837424 **Description** Location of Leckwith Top Quarry, as noted from the OS 1880 First Edition Map. Quarry now disused. (01) **Condition** Not known Year: 2004 **Status** None recorded **Rarity** rarity **Group Association** g_ass **Historical Association** h_ass **Confidence** con **Value** value **Effect** effect

ID 03779s **Name** Leckwith Churchyard

Type Medieval, Churchyard, Rank: 1 NGR ST15797440

Description On the 1841 tithe map the churchyard is rectilinear. On the 1st edn OS map shows as irregular, but may have been central part of an oval enclosure, of which N third is still traceable adjoining the churchyard, though there is some discrepancy in the lines of the E boundaries. Evans 2003: GGAT 73 Early-Medieval Ecclesiastical Sites Project database Condition Not known Year: 2004 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 03791s Name Leckwith

Type Early Medieval, PLACE NAME, Rank: 1 NGR ST15797440 **Description** Pierce (1968, 51; 2002, 102-3) tentatively connects the placename Leckwith with the personal name Helygwydd (known elswhere from the Book of Llandaff and a holy well in Gwent) and suggests that if this is the case, it may be a case of the original saint of the church giving a name to the parish as a whole, cf Baglan. Evans 2003: GGAT 73 Early-Medieval Ecclesiastical Sites Project database **Condition** Not known Year: 2004 **Status** None recorded **Rarity** rarity **Group Association** g_ass **Historical Association** h_ass **Confidence** con **Value** value **Effect** effect

ID 04119s Name Leckwith Bottom Quarry Type Unknown, quarry, Rank: - NGR ST15777497 Description Quarry shown on 1st edition OS map 1880. Condition Not known Year: 2010 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 04120s **Name** Lime Kiln **Type** Post-Medieval, lime kiln, Rank: - NGR ST1585875115 **Description** 'Old Limekiln' recorded on 1st edition OS map 1880. **Condition** Not known Year: 2010 **Status** None recorded **Rarity** rarity **Group Association** g_ass **Historical Association** h_ass **Confidence** con **Value** value **Effect** effect

ID 04121s Name Structure Type Unknown, strucutre, Rank: - NGR ST1583675104 Description Structure shown on 1st edition OS map 1880. Is not visible on 2nd edition Os map 1901. Possibly destroyed. Condition Not known Year: 2010 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 04122s **Name** Two Structures

Type Unknown, structure, Rank: - NGR ST1585975125 **Description** Structure shown on 1st edition OS map 1880. There are two structures shown on the early maps and it is difficult to discern which is the limekiln. This structure may be the limekiln (PRN 04120s). **Condition** Not known Year: 2010 **Status** None recorded **Rarity** rarity **Group Association** g_ass **Historical Association** h_ass **Confidence** con **Value** value **Effect** effect

ID 04123s Name Well Type Unknown, well, Rank: - NGR ST1590074796 Description Well noted on 1st edition OS map 1880. Condition Not known Year: 2010 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 04124s **Name** Clay Pit **Type** Post-Medieval, clay pit, Rank: - NGR ST1489675421 **Description** Clay pit recorded on 2nd edition OS map 1901. **Condition** Not known Year: 2010 **Status** None recorded **Rarity** rarity **Group Association** g_ass **Historical Association** h_ass **Confidence** con **Value** value **Effect** effect

ID 04125s **Name** Clay Pit **Type** Post-Medieval, clay pit, Rank: - NGR ST1499875657 **Description** Clay pit recorded on 2nd edition OS map 1901. Greatly enlarged on modern map. **Condition** Not known Year: 2010 **Status** None recorded **Rarity** rarity **Group Association** g_ass **Historical Association** h_ass **Confidence** con **Value** value **Effect** effect

ID 04126s Name Llandaff and Dinas Powys Sewage Works Type Post-Medieval, sewage works, Rank: - NGR ST1525375817 Description Sewage Works recorded on 4th edition OS map 1920. Part destroyed by construction of modern A4232 road. What appears to be the holding tanks survive in woodland to south of the roadway. Condition Not known Year: 2010 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 04128s Name Quarry in Factory Wood Type Post-Medieval, quarry, Rank: - NGR ST161746 Description Quarry noted on 1st edition OS map 1880. Recorded as 'Old Quarry on 2nd edition OS map 1901. Condition Not known Year: 2010 Status None recorded **Rarity** *rarity* **Group Association** *g_ass* **Historical Association** *h_ass* **Confidence** *con* **Value** *value* **Effect** *effect*

ID 04167s Name Barrage balloon mooring point, Lawrenny Avenue, Cardiff Type Modern, mooring bollard, Rank: - NGR ST1576875909 Description A Barrage Balloon mooring point located within a roundabout at the end of Lawrenny Avenue, Canton, Cardiff. The mooring point is associated with the World War II RAF station, RAF Llandaff. The station was used to repair Barrage Balloons. All that remains is the mooring point, which is a large concrete stone located within the roundabout. Condition Moved Year: 2012 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 04321s Name Clay pit, Plymouth Wood
Type Post-Medieval, clay pit, Rank: - NGR ST1497975642
Description Clay pit visible on 2nd edition OS map, by the 3rd edition OS the site has expanded. By the 4th edition the site has expanded further and covered an area approximately 168m N-S by 100m E-W. The remains are still visible on 2012 mapping where the site is described as clay pit disused.
Condition Not known Year: 2012
Status None recorded
Rarity rarity Group Association g_ass Historical Association h_ass
Confidence con Value value Effect effect

ID 04322s Name Clay pit Type Post-Medieval, clay pit, Rank: - NGR ST1489975430 Description Clay pit shown on the 2nd edition OS as old clay pit, the site remains visible on 2012 mapping and covers a maximum area of approximately 65m N-S and 28m E-W. Condition Not known Year: 2012 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 05036s Name Ninian Park Section, 3rd Western General Hospital, Cardiff Type MODERN, MILITARY HOSPITAL, Rank: - NGR ST167757 Description The location of this sub-section of 3rd Western General Hospital is unknown but is presumably in the vicinity of the old Ninian Park stadium (Crawford 2014). Condition NOT KNOWN Year: 2014 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 05051s **Name** Landsdowne Road Section, 3rd Western Gen Hospital, Cardiff **Type** MODERN, HOSPITAL, Rank: 1 **NGR** ST1570176081

Description This sub-section of 3rd Western General Hospital was probably located in the large Sanatorium located to the west of Cardiff, which is accessed from Landsdowne Road. The Sanatorium has been mostly destroyed and replaced with modern housing although an apparent section of the original range is still called Landsdowne Hospital (Crawford 2014).
Condition NEAR DESTROYED Year: 2014
Status None recorded
Rarity rarity Group Association g_ass Historical Association h_ass
Confidence con Value value Effect effect

ID 05152s Name Miles Master Mk III W8698 crash site Type MODERN, AIR CRASH SITE, Rank: - NGR ST1675674871 Description Miles Master Mk III W8698 was assigned to 53 OTU. It crashed during a forced landing at The Droves, Grangetown, Cardiff, on 18th January 1942 (the Droves is the area of Cardiff between Sloper Road and the Ely River) (Huckfield & Burton 2013). Condition NOT KNOWN Year: 2013 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 05459s Name Lodge, Lansdowne Hospital Type MODERN, LODGE, Rank: - NGR ST1561276144 Description Lodge located within the grounds of Lansdowne Hospital. First depicted on the Third Edition Ordnance Survey mapping of 1920, when the hospital was a Sanatorium (05051s) (OS map). Included on the Cardiff Council Local List (Cardiff Council). Condition NOT KNOWN Year: 1920 NEAR INTACT Year: 2018 Status UA Local List (Adopted) Cardiff: 4 Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

ID 05615s Name Building in Factory Wood, East of Leckwith Type POST MEDIEVAL, HOUSE, Rank: - NGR ST1608674783 Description A post-medieval building in Factory Wood in Leckwith within Michaelston community. The structure is depicted on the 1st edition Ordnance Survey map from 1880 onward. The 1st edition of Ordnance Survey map depicts the building as a rectangular shaped structure with a northwest - southeast alignment and an associated small building to the southeast. On the later maps of 1901 and 1919 the building is labelled as 'The Factory' and on the map from 1941 as 'Factory Cottage'. No further information is currently available. Condition NOT KNOWN Year: 2016 Status None recorded Rarity rarity Group Association g_ass Historical Association h_ass Confidence con Value value Effect effect

Appendix VI. New archaeological interests Gazetteer

HER Field Name	Field Definition
Historic Asset UID/PRN	LQ001
Site Name	Leckwith Bridge House
Summary Welsh	Tŷ wedi'i labeli 'Bridge Farm' ar Fap Ystad 1824.
Summary English	House labelled 'Bridge Farm' on 1824 Estate Map.
Description	House labelled 'Bridge Farm' in 1824. This changed to 'Cardiff Arms Public House' by 1841 Tithe Map, then 'Leckwithbridge' on 1st Edition OS Map (1880). Subsequently as 'Leckwith
1107	Bridge House' from 2 nd Edition OS Map (1901) to 4 th Edition (1941).
NGR	ST1585975203
Easting	
Northing	
NGR Qualifier	
NGR Derivation	
Туре	House
Period	Unknown
Survival Condition	Intact
Condition Rating	
Condition Description	
Broad class	Structure
Evidence	Map Regression
Year	2019
References	-
Record Complied By	Sophie Lewis-Jones
Record Complied On	13/08/2019
Copyright Holder	GGAT Ltd.

HER Field Name	Field Definition
Historic Asset UID/PRN	LQ002
Site Name	Old Weir
Summary Welsh	'Hen Gored' wedi'i nodi ar Argraffiad Cyntaf Map 1880.
Summary English	'Old Weir' noted on 1880 1st Edition Mapping.
Description	'Old Weir' noted on 1880 1st Edition Mapping.
NGR	ST1582375267
Easting	
Northing	
NGR Qualifier	
NGR Derivation	
Туре	Weir
Period	Post-medieval
Survival Condition	Near Destroyed
Condition Rating	
Condition Description	
Broad class	Industrial
Evidence	Map Regression
Year	2019
References	-
Record Complied By	Sophie Lewis-Jones
Record Complied On	13/08/2019
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HER Field Name	Field Definition
Historic Asset UID/PRN	LQ003
Site Name	Cottage
Summary Welsh	Adeiledd (bwthyn) wedi'i gofnodi ar Fap Degwm (1841).
Summary English	Structure (cottage) depicted on Tithe Map (1841)
Description	Rectangular structure seen on Landough, Cogan and Leckwith Parish Tithe Map (1841). Parcel
_	325, apportionment name- cottage and garden.
NGR	ST1595675280
Easting	
Northing	
NGR Qualifier	
NGR Derivation	
Туре	Structures
Period	Unknown
Survival Condition	Near Destroyed
Condition Rating	
Condition Description	
Broad class	Structure
Evidence	Map Regression
Year	2019
References	-
Record Complied By	Sophie Lewis-Jones
Record Complied On	13/08/2019
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HER Field Name	Field Definition
Historic Asset UID/PRN	LQ004
Site Name	Milestone
Summary Welsh	'Carreg Filltir' wedi'i nodi ar Argraffiad Cyntaf Map 1880.
Summary English	'Milestone' noted on 1880 1st Edition Mapping.
Description	'Milestone' noted on 1880 1st Edition Mapping, onwards, labelled as 'Ely Station, Cardiff and
	Leckwith'
NGR	ST1595675280
Easting	
Northing	
NGR Qualifier	
NGR Derivation	
Туре	Milestone
Period	Post medieval
Survival Condition	Unknown
Condition Rating	
Condition Description	
Broad class	Milestone
Evidence	Map Regression
Year	2019
References	-
Record Complied By	Sophie Lewis-Jones
Record Complied On	10/05/2019
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HER Field Name	Field Definition
Historic Asset UID/PRN	LQ005
Site Name	Drain cover
Summary Welsh	Gorchudd draen, Carthffosydd Caerdydd (1857)
Summary English	Drain cover, Cardiff Sewers (1857)
Description	Identified during site visit. Drain cover, Cardiff Sewers (1857)
NGR	ST1584075267
Easting	
Northing	
NGR Qualifier	
NGR Derivation	
Туре	Drain cover
Period	Post-medieval
Survival Condition	Intact
Condition Rating	
Condition Description	
Broad class	Drain
Evidence	Map Regression
Year	2019
References	-
Record Complied By	Sophie Lewis-Jones
Record Complied On	10/05/2019
Copyright Holder	GGAT Ltd.





QUALITY CONTROL

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As part of our desire to provide a quality service we would welcome any comments you may wish to make on the content or presentation of this report.



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