

Plot 5, Cardiff Bay

Archaeological Desk-based Assessment

Date: August 2022
By: Rachel Morgan and Elspeth St John-Brooks
Client: Expedite
Project Code: RR0513
GGAT ref: CAR0722



**Red River
Archaeology**



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1. EXECUTIVE SUMMARY

Red River Archaeology was commissioned by Expedite on behalf of Cardiff Sixth Form College to undertake an Archaeological Desk-Based Assessment (ADBA) in relation to a proposed school boarding accommodation development at Plot 5, Cardiff Bay (NGR ST 19436 74714). This ADBA assesses the impact the proposed development may have on any potential buried or former Heritage Assets (archaeological remains) within the footprint of the development. An assessment of the impact of the proposed development on other designated and non-designated Heritage Assets including Listed Buildings and Conservation Areas within the study area is presented in a separate report by Ashley Davies Architects.

A 500m study area around the proposed development site was examined in order to identify and determine the likely nature, extent, preservation and significance of any known or possible buried or former Heritage Assets that may be present within the Site. The Historic Environment Record (HER) maintained by the Glamorgan Gwent Archaeological Trust holds 16 entries for the study area comprising: 6 non-designated buried or former Heritage Assets and 10 previous archaeological events from the surrounding area.

The Site was deemed to have a low potential for buried archaeological remains overall, except for the southwest of Site which has a high potential for survival of structural elements of the Bute East Dock and the associated lock system. There is a potential for survival of paleoenvironmental horizons beside or below the Dock, however the extent of disturbance in the area and depth of the Dock is unknown. The proposed development scheme for the Site was unavailable at the time of writing, however, it could have a severe impact on any buried archaeological remains which were present within the Site, depending on the design of the development.

CRYNODEB GWEITHREDOL

Cafodd Red River Archaeology ei gomisiynu gan Expedite ar ran Coleg Chweched Dosbarth Caerdydd i gynnal Asesiad Archaeolegol Pen Desg mewn perthynas â datblygu llety preswyl arfaethedig ar gyfer yr ysgol ar Lain 5, Bae Caerdydd (NGR ST 19436 74714). Bydd yr Asesiad Archaeolegol Pen Desg yn asesu'r effaith y gall y datblygiad arfaethedig ei chael ar unrhyw Asedau Treftadaeth claddedig posibl neu flaenorol (gweddillion archaeolegol) o fewn ôl-troed y datblygiad. Caiff asesiad o effaith y datblygiad arfaethedig ar Asedau Treftadaeth dynodedig a heb eu dynodi eraill, gan gynnwys Adeiladau Rhestredig ac Ardaloedd Cadwraeth yn ardal yr astudiaeth, ei gyflwyno mewn adroddiad ar wahân gan Ashley Davies Architects.

Archwiliwyd ardal astudiaeth 500m o amgylch safle'r datblygiad arfaethedig er mwyn nodi a phenderfynu ar natur debygol, maint, cadwraeth ac arwyddocâd unrhyw Asedau Treftadaeth claddedig hysbys neu bosibl neu flaenorol a all fod yn bresennol o fewn y Safle. Mae'r Cofnod

Amgylchedd Hanesyddol a gynhelir gan Ymddiriedolaeth Archaeolegol Morgannwg Gwent yn nodi 16 o gofnodion ar gyfer ardal yr astudiaeth, gan gynnwys: 6 Ased Treftadaeth claddedig neu flaenorol heb eu dynodi a 10 digwyddiad archaeolegol blaenorol o'r ardal amgylchynol.

Ar y cyfan, ystyriwyd mai potensial isel am weddillion archaeolegol claddedig oedd gan y Safle, ac eithrio yn ne-orllewin y Safle lle mae'n hynod bosibl bod elfennau strwythurol Doc Dwyrain Bute a'r system glo gysylltiedig wedi goroesi. Mae potensial bod gorwelion paleoamgylcheddol wedi goroesi wrth ochr neu islaw'r Doc, ond nid yw hyd a lled yr aflonyddwch yn yr ardal na dyfnder y Doc yn hysbys. Nid oedd cynllun y datblygiad arfaethedig ar gyfer y Safle ar gael adeg ysgrifennu, ond, gallai gael effaith ddifrifol ar unrhyw weddillion archaeolegol claddedig a oedd yn bresennol o fewn y Safle, yn dibynnu ar ddyluniad y datblygiad.

2. INTRODUCTION

2.1 Project Background

2.1.1 Red River Archaeology was commissioned by Expedite on behalf of Cardiff Sixth Form College to undertake an Archaeological Desk-Based Assessment (ADBA) in advance of a proposed development for boarding accommodation for a school on the Plot 5 Site in Cardiff Bay (the Site). This ADBA only assesses the impact of the proposed development on any potential buried or former Heritage Assets (archaeological remains) within the Plot 5 Site footprint and 500m study area. An assessment of the impact of the proposed development on other designated and non-designated Heritage Assets and their setting is presented in a separate report by Ashley Davies Architects.

2.2 Site Location and Description

2.2.1 The Plot 5 Site is a c. 650m² area of hardstanding bounded by the Premier Inn Cardiff Bay to the west, the Q-Park carpark and access roads to the northwest and northeast, and Pierhead Street to the southeast. A small man-made water body bounds the north-eastern side just beyond the boundary of the Site.

2.2.2 The underlying solid geology for the Site is Mercia Mudstone Group, a sedimentary bedrock formed c.201-252 million years ago in the Triassic Period in a local environment previously dominated by hot deserts. Superficial deposits are recorded as Tidal Flat Deposits – clay, silt and sand formed up to 2 million years ago in the Quaternary Period in a local environment dominated by shorelines (BGS, 2022).

2.2.3 The predominant soil type on this site is Soilscape 21, which is a loamy and clay soil of coastal flats with naturally high groundwater (Cranfield Soil and Agrifood Institute, 2022).

3. AIMS AND OBJECTIVES

3.1.1 The Historic Environment is a material consideration in the planning process and its value is recognised in national and local planning policy. The aim of this report is to assess the impact of the proposed development on any buried or former Heritage Assets (archaeological remains) and to provide a suitable strategy to mitigate any adverse effects, if required, as part of a planning application for the works. The aim is achieved through the following objectives:

- Identify the presence of any known or potential buried or former Heritage Assets that may be affected by the proposals
- Describe the significance of such assets taking into account factors which may have compromised asset survival
- Assess the likely impacts upon the significance of the assets arising from the proposals
- Provide recommendations for further investigation and/or mitigation where required, aimed at reducing or removing completely any adverse effects

4. PLANNING FRAMEWORK

4.1.1 This Archaeological Desk-Based Assessment has been prepared to support a planning application for the development of the Site.

4.1.2 Relevant legislation, policy and guidance is set out below:

Ancient Monuments and Archaeological Areas Act 1979

4.1.3 The Ancient Monuments and Archaeological Areas Act 1979 (as amended) protects the fabric of Scheduled Monuments but does not afford statutory protection to their settings.

Planning (Listed Building and Conservation Areas) Act 1990

4.1.4 The Planning (Listed Building and Conservation Areas) Act 1990 sets out broad policies and obligations relevant to the protection of Listed Building and Conservation Areas and their settings.

4.1.5 Sections 66(1) states:

“In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, 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”.

4.1.6 Section 69 of the Act requires local authorities to define as Conservation Areas any ‘areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance’ and Section 72 gives local authorities a general duty to pay special attention ‘to the desirability of preserving or enhancing the character or appearance of that area’ in exercising their planning functions. These duties are taken to apply only within a Conservation Area. The Act does not make specific provision with regard to the setting of a Conservation Area, that is provided by the policy framework outlines below.

Historic Environment (Wales) Act

4.1.7 The Historic Environment (Wales) Act was given Royal Assent in March 2016. This Act provides the legislative framework for managing the historic environment in Wales. Accompanying the Act is new policy and guidance in the form of a Technical Advice Note (TAN) specific to the historic Environment (see below), and changes to Planning Policy Wales (PPW) Chapter 6 – Conserving the Historic Environment.

Planning Policy Wales

4.1.8 The Welsh Government has published Planning Policy Wales (PPW), currently updated to Version 11 from February 2021. This sets out the land use planning policies of the Welsh

Government. It is supplemented by a series of Technical Advice Notes (TANs). Procedural advice is given in circulars and policy clarification letters.

4.1.9 Section 6.1 of PPW, entitled 'The Historic Environment', provides policy for planning authorities, property owners, developers and others on the conservation and investigation of Heritage Assets. Section 6.1 sets out the Welsh Government's specific objectives for the historic environment as seeking to:

- Protect the Outstanding Universal Value of the World Heritage Sites;
- 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, whilst 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.

4.1.10 The historic environment comprises all the surviving physical elements of previous human activity and illustrates how past generations have shaped the world around us.

Technical Advice Note (TAN) 24: The Historic Environment

4.1.11 The purpose of the 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 applications. This 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.

4.1.12 The following relevant aspects which are covered in detail include:

Archaeological Remains

- 4.1.13 The conservation of archaeological remains is a material consideration in determining a planning application. When considering development proposals that affect Scheduled Monument or other nationally important archaeological remains, there should be a presumption in favour of their physical preservation in situ. In cases involving less significant archaeological remains, local planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development (TAN 24, 2017).
- 4.1.14 Where development might reveal, disturb, or destroy archaeological remains, including palaeoenvironmental evidence, it is important that the opportunities to record archaeological evidence are taken and that archaeological remains are not needlessly destroyed. The ability to record such evidence should not be a factor in deciding whether controlled removal should be permitted.
- 4.1.15 When considering planning applications that affect known or potential archaeological remains, the local planning authority should consult with their archaeological advisor, about the impact including the potential scale and harm, of the development on archaeological remains, and/or the adequacy of the mitigation of what has been proposed. These two factors are material considerations in determining the planning applications. Where a planning application directly affects a Scheduled Monument and its setting, then the local planning authority is required to consult the Welsh Ministers through Cadw.
- 4.1.16 The case for the preservation of archaeological remains that are not considered to meet the criteria for national importance, must be assessed on the individual merits of each case. The local planning authority must consider relevant policies and material considerations and will need to weigh the significance of the remains against the benefits of and need for the proposed development.

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

- 4.1.17 This document provides 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/s and to assist in decision making where the historic environment is affected by the planning process.
- 4.1.18 There are six principles:
- Historic assets will be managed to sustain their values;

- Understanding the significance of historic assets is vital;
- The historic environment is a shared resource;
- Everyone will be able to participate in sustaining the historic environment;
- Decisions about change must be reasonable, transparent, and consistent; and
- Documenting and learning from decisions is essential.

4.1.19 In considering any planning application for development, the planning authority will be mindful of the framework set by government policy, by current Development Plan Policy and by other material considerations.

Local Planning Policy

4.1.20 The Local Planning Policy of the governing county in relation to Heritage Assets is within the Cardiff Local Development Plan 2006-2026. The plan was adopted in 2016 and Policy KP17 Built Heritage seeks to protect, manage and enhance Cardiff's distinctive Heritage Assets and Policy EN9 Conservation of the Historic Environment relates to development which may affect Heritage Assets or their setting.

5. SCOPE AND METHODOLOGY OF WORKS

5.1 Desk-based Assessment

5.1.1 The Archaeological Desk-based Assessment was undertaken in accordance with current best practice and the Chartered Institute for Archaeologists' *Standard and guidance for desk-based assessment* (CIfA 2020). The study area for designated and non-designated buried or former Heritage Assets and previous archaeological events was defined as a zone 500m from the centre of the proposed development Site (1km total width) (Fig. 1).

5.1.2 The principal sources of information which were consulted to provide information about buried or former Heritage Assets within the study area are the Historic Environment Record (HER) held by Glamorgan Gwent Archaeological Trust, the National Monuments Record for Wales (NMR), Cadw, aerial photograph library held by the National Archives Aerial Photographs Unit, and the National Archives. Further relevant information was researched from a variety of additional sources including:

- Geological maps
- Ordnance Survey maps
- Tithe, Apportionment and Parish maps (where available)
- Glamorgan Record Office
- Natural Resources Wales
- Google maps and satellite images
- LiDAR data

5.2 Field Visit

5.2.1 A field visit to assess the archaeological significance of the site and to assess the setting of any identified buried or former Heritage Assets was undertaken on 6 June 2022, and a written record produced. This identified any visible archaeological remains and landscape features, current land use, areas of disturbance, areas of potential colluvial or alluvial deposits etc. The setting of the Site within the surrounding landscape was also noted regarding any buried or former Heritage Assets identified in the desk-based assessment.

5.3 Assessment of Significance

5.3.1 In assessing the significance of any buried or former Heritage Assets identified within the study area and its environs the archaeological, historic, architectural and artistic interests pertaining to the assets were considered. The likelihood of the presence of unknown buried or former

Heritage Assets within the area of the proposed development site was also considered. This was based on the review of the character and distribution of known buried or former Heritage Assets in the surrounding area and the characteristics of the study area.

5.4 Potential Impact of Proposed Works

5.4.1 The potential impact of the proposed works was considered in relation to the proposed development with reference to the known buried or former Heritage Assets and their setting in the study area. If deemed necessary, mitigations of these impacts have been suggested along with recommendations for possible further archaeological work if required.

5.5 Reporting & Archiving

5.5.1 The results of the ADBA will form the basis of a full archive to professional standards, in accordance with current Historic England guidelines (English Heritage, 2008; Historic England, 2015) and comply with RCAHMW guidelines of Wales (RCAHMW, 2015), the *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (2018) and the ADS digital records (archaeologydataservice.ac.uk/advice).

5.5.2 The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the CIfA in that organisation's Code of Conduct (CIfA, 2021) and this will be adhered to in relation to the current project.

5.5.3 Digital archives will be submitted to RCAHMW. The project archive, which includes photographs and site notes, will be deposited with the relevant museum or other agreed body. It will be integrated into the archive of any subsequent fieldwork.

5.5.4 A copy of the final report will be submitted to the regional HER in accordance with the guidelines set out in the *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (2018).

6. SUMMARY OF RESULTS

6.1 Historic Baseline Data

6.1.1 The ADBA has identified 6 buried or former Heritage Assets (Fig. 2; Tables 1) and 10 previous Archaeological Events (Fig. 3; Table 2) within and around the 500m study area. The summary presented below is derived from information held by the GGAT HER Charitable Trust Database Right.

6.1.2 The Site lies within the southern area of Cardiff known as Butetown, the dockland area also known as Tiger Bay. The development of the area primarily dates from the late 18th to 19th centuries but also contains modern regenerative development. There is evidence for activity in the vicinity from the Roman period due to a Roman road which would have led to a harbour somewhere near the confluence of the River Taf and the Bristol Channel. Not much is known of the subsequent use or development of the harbour until the late 18th century by which time South Wales had become dominant in the British iron and coal trade (Atkinson and Baber 1987, 3) and the Butetown docks were developed. Recognising the importance of transportation and access in Cardiff's role in the export of iron and coal, the 2nd Marquis of Bute built West Bute Dock (PRN 34257) which opened in 1839 (Rees 1969, 264), closely followed by the Taff Vale Railway (PRN 91550) in 1841 which ran between Merthyr Tydfil and Cardiff after which use of the Sea Lock declined (Hilling 1990, 184). His work was continued by his son, John Crichton-Stuart 3rd Marquis of Bute, who oversaw the construction of offices and housing within Butetown (*ibid.*). Butetown declined during the 20th century, however, the dockland area has undergone regeneration over the past few decades and Cardiff Bay is now a leisure and entertainment destination.

6.2 Prehistoric Period (Prior to AD43)

6.2.1 No buried or former Heritage Assets from the Prehistoric Period are known within the study area. However, the potential for palaeoenvironmental horizons within the area has been reported in the form of prehistoric peat deposits.

6.3 Roman Period (AD 43-410)

6.3.1 Roman activity is known within Cardiff City centre with the construction of the fort on the site of the present Cardiff Castle during the 1st century AD. The southern section of Roman Road RR621-20 (Castell Collen to Cardiff) is present in the northwest of the study area as it is presumed to have run along Bute Street to the former Roman harbour (Sherman and Evans 2004). The precise southern end of the road is unknown.

6.4 Early Medieval Period (AD 410-1066)

6.4.1 No Early Medieval assets are known within the study area.

6.5 Medieval Period (1066-1540)

6.5.1 No Medieval assets are known within the study area.

6.6 Post-Medieval Period (1540-1900)

6.6.1 The majority of buried or former Heritage Assets within the study area are Post-Medieval in date and consist of 5 non-designated structures whose condition is recorded as either unknown, damaged/destroyed or relocated.

6.6.2 The Bute East Dock (GGAT01979s) is recorded within the study area northwest of Site, however, this location is recorded only to the grid square and is therefore imprecise. The eastern line of the Glamorganshire Canal as recorded in the HER represents the line of the Bute East Dock and is recorded as having been located within the bounds of Site, running northeast-southwest. The southern end of the Dock was located within the Site, with the lock gates to the Bute East Dock Basin at the southwest extent of Site, and the main body of the Dock extended northeast before turning north. The Bute East Dock is recorded in the HER as having been built in 3 stages between 1835 to 1859 and was primarily used for the transport of large quantities of coal. However, the Tithe map from 1845 (fig. 4, see below) shows the Bute East Dock had not been constructed at that time. The construction timeframe recorded in the HER (and the location spot) may refer to the Bute Docks as a whole, as the Tithe map shows the structures later known as the Bute West Dock and Bute West Dock Basin (depicted in the HER data as the central line of the Glamorganshire Canal, Fig. 2) had already been constructed by 1845. The northern extent of the Bute East Dock has been retained as a feature in the modern Atlantic Wharf residential area.

6.6.3 The Norwegian Church (GGAT00813s) was previously located to the northeast of Site and was constructed in 1868. The church was dismantled in 1987 and rebuilt in 1992 in its present position as an Arts Centre along Harbour Drive to the south of Site.

6.6.4 Two former buildings, Mount Stuart Public House (GGAT01099s) and 2 Bute Crescent (GGAT01100s) are recorded as having been located southwest of Site along Bute Crescent, however, both buildings were demolished in 1987. 33-34 Mount Stuart Square (GGAT05299s) to the west of Site which was present on the 1st edition OS map is also recorded as having been demolished.

6.7 Modern Period (1901-present)

6.7.1 No modern buried or former Heritage Assets are recorded from within the study area.

6.8 Undated

6.8.1 No undated buried or former Heritage Assets are recorded from within the study area.

6.9 Previous Archaeological Works (Events)

6.9.1 The HER records 10 Events within the 500m search radius of Site (Appendices Table 2). Of these, a DBA, E001487, and two projects encompass the Site: E005431, The Rural Settlement of Roman Britain; and E006100, a Rapid Coastline Zone Assessment, with the remaining Events being predominantly Desk-based Assessments. These generally identified low potential for buried archaeological remains predating the Post-Medieval development of the area. However, the potential for palaeoenvironmental horizons in the form of prehistoric peat deposits below the development was reported. One watching brief, (E006416), took place to the immediate east of the study area which identified remains associated with the known Post-Medieval buildings which had occupied the site, and also recovered ceramics, animal bone and flint nodules from spoil associated with the enabling works.

6.10 Historic Landscape Areas

6.10.1 The Site lies within the Cardiff Bay Historic Landscape (CRDFFHL051), a mixed area characterised by commercial and civic buildings as well as residential and leisure and includes Listed Buildings. Since 1987, this area has seen the construction of government and civic buildings, commercial buildings, leisure attractions and modern residential developments. It has retained some key historical buildings, such as the renowned Coal Exchange in Mount Stuart Square to the west of Site, around which a cluster of Listed Buildings of late Victorian and Edwardian date still stand. The Bute West dock has been infilled and redeveloped for housing, with the Bute East dock retained as a feature, surrounded by more residential development. Amongst the most notable developments have been the construction of the Senedd, which houses the Welsh Assembly, and the nearby Wales Millennium Centre. The mouth of the Taff was cut off from the Bristol Channel by the construction of the Cardiff Bay Barrage in the 1990s, which has seen the creation of a marina within the barrage and the popular Mermaid Quay development along the water's edge (NRW Wales Environmental Information Portal).

6.11 Cartographic Evidence

6.11.1 The Tithe map covering the parish of Saint Mary, Cardiff, in the county of Glamorgan, dated 1845) shows that the area has changed drastically in layout since this survey was completed. The Site is located at the junction of three plots: a small section of plot 46 to the north; a section of plot 50 to the east; and plot 50a covers most of the Site to the south and east. Plot 46 is labelled as Reservoir Banks and Ditches, plot 50 and 50a were pastureland during this period. The area

is not built up at this stage although development of the docks and associated structures including the Bute West Dock and Bute West Dock Basin can be seen to the west of Site (Fig. 4).

- 6.11.2 The Ordnance Survey 6-inch map of Glamorgan Sheet XLVII, surveyed from 1878-9 and published in 1885 shows Plot 5 Site overlies the south end of the Bute East Dock where it joins the lock into the Bute East Dock Basin. A small section of trackway is present in the northwest corner of Site and the lock gates appear to lie just within the Site boundary in the southwest corner (Fig. 5).
- 6.11.3 The Ordnance Survey 6-inch map of Glamorgan Sheet XLVII.NE, revised in 1898-9 and published in 1901 shows that Plot 5 Site is unchanged (Fig. 6).
- 6.11.4 The Ordnance Survey 6-inch map of Glamorgan Sheet XLVII.NE, revised in 1915 and published in 1922 shows Plot 5 Site is unchanged although it now appears to encompass more of the north side of the lock, possibly due to increased accuracies in surveying techniques (Fig. 7).
- 6.11.5 The Ordnance Survey 6-inch map of Glamorgan Sheet XLVII. NE, revised in 1947 and published c.1949 shows the Plot 5 Site is unchanged except for the addition of a small outbuilding on the north side of the lock, the northern side of which could be incorporated in the Site (Fig. 8).

6.12 Aerial Photographic Consultation

- 6.12.1 Twenty aerial photographs received from the Welsh Government Aerial Photographs Unit encompass the Site. Photograph 4220 M3112 28 from June 1942 is grainy but shows the Site as depicted in the corresponding OS mapping, with various small structures around the lock gates at the southwest corner. When compared with the layout of the modern-day Site, this photograph shows a small part of the canals water body remains on the northeast boundary of the Site as mentioned in the site description.
- 6.12.2 Photographs 4702 CPEUK2258 5042 and RAFCPEUK_2081 4427 from 1947 shows the Site as unchanged, however the resolution is grainy. Photograph 4822 RAFCPEUK2520 5318 taken in 1948 is also a little grainy and appears to show the Site as unchanged.
- 6.12.3 Photograph 4805 RAF58_94 5005 from 1948 shows the rail tracks and two small outbuildings to the southwest of Site along with 3 or 4 buildings to the southeast of Site. The photograph also shows four mooring posts to the northeast and southwest of the lock gates, which could be within the Site boundary, and what could be a large mooring post and a hoist or winch structure beside the canal southeast of Site. Various other objects are shown in this area in the photograph, but these are not readily identifiable and could just be temporarily stored in the area.

- 6.12.4 Photograph 6209 58_RAF_5098 F21 0049 taken in 1962 appears to show the Site as unchanged, as does photograph 6310 OS 63_074 052 taken in 1963, however the resolution in this photograph is extremely grainy. Photograph 6802 MAL 60_68 119 taken in 1968 shows the Site appears largely unaltered although the trackway to the west can no longer be seen. This photograph also shows the beginning of the in-filling of the north end of the Bute West Dock.
- 6.12.5 Photograph 7156 RAF39_3764 F43 042 taken in 1971 shows most of the outbuildings to the southeast of the Site appear to have been removed except for that nearest the lock, as have the possible large mooring post and hoist/winch. The Bute West Dock and the Bute West Dock Basin have both been filled in.
- 6.12.6 Photograph 7940 OS79_129 100 taken in 1979 shows the Site is partially in-filled, with the Bute East Dock Basin, the lock, and the junction with Junction Lock all now levelled. A new road layout and roundabout runs to the south and east of the Site. The outbuilding to the southwest of the Site still appears to be in-situ. Photograph 8101 JAS3181 182 and 8101 JAS3281 092, both taken in 1981, shows the Site as unchanged from 1979. Photographs 8212 OS82_72 005 and Infra Red 8445 OS84_092 009, taken in 1982 and 1984 respectively both show the Site as unchanged.
- 6.12.7 Between 1984 and 1991, the remainder of the Bute East Dock within the Site was in-filled. Photograph Geonex159_91 0238 taken in 1991 appears to show the Site in use as a car park, with the remaining outbuilding surrounded by fencing. A length of open drain is being created running northwest-southeast, which is still in situ and bounds the Site to the northeast.
- 6.12.8 Photograph 9211 OS92_038 036 taken in 1992 shows the Site as unchanged. Photograph 9489 OS94_187 065 taken in 1994 shows the road layout to the southeast of the Site has altered, with the removal of the roundabout and the creation of the modern day Pierhead Street. Photograph 9599 OS95_155 061 taken in 1995 shows the Site as unchanged.
- 6.12.9 Photograph Getmapping taken in 2000 shows the outbuilding has been removed from the Site and the modern-day layout of Bute Place is in-situ.
- 6.12.10 Photograph Nextperspectives 2009-09-18 taken in 2009 shows the Site has the modern-day car park in-situ to the north of the Site. Photograph Bluesky Getmapping taken in 2016 shows the Site as unchanged.
- 6.12.11 Satellite imaging from Google Earth taken in 2018 shows the construction of the Premier Inn on the west boundary of the Site. Subsequent Satellite imaging shows the Site as unchanged.

6.13 LiDAR Consultation

- 6.13.1 LiDAR data at DSM 1m resolution from Natural Resources Wales shows the Site as a relatively level area (Natural Resources Wales Lle Map Browser). This image is thought to pre-date 2009,

due to the presence of structures elsewhere in the image known to have been demolished by then.

6.14 Site Visit

6.14.1 The site visit was conducted on 6 June 2022 on a bright sunny day and visibility was good. The Site consists of an area of asphalt surrounded by wire fencing on the northwest side of Pierhead St., partially used as a car park (Q-Park) (Fig. 1; Plates 1-8). The northwest corner of the area is used as a car park, but the plot is otherwise unoccupied. The Premier Inn flanks the southwestern boundary of the Site (Plates 2, 3, 5 and 8) and Pierhead Street Car Park building and access road is located just beyond the north-western boundary (Plates 1, 3, and 4). The Site is surrounded by modern buildings constructed in the late 20th and early 21st centuries.

6.15 Setting of Heritage Assets

6.15.1 Setting contributes to the significance of a Heritage Asset and allows that significance to be appreciated (Historic England 2017).

6.15.2 None of the identified buried or former Heritage Assets remain in situ and therefore do not have a setting. The setting of Listed Buildings and Conservation Areas will be detailed in the report by Ashley Davies Architects.

6.16 Significance of Heritage Assets

6.16.1 The Site is recorded as containing the line of the Glamorganshire Canal (PRN01682.16, PRN01682.30, PRN01682.39) which is recorded in the HER as a Registered Park and Garden with a Grade II Listing ((Gm) 22 (CDF)) and would be of high significance. However, the line recorded in the HER follows both the Bute East Dock and Bute West Dock as well as the Glamorganshire Canal itself which lies further the west. The length of the Canal which runs through Butetown has been infilled and turned into Canal Park, and it is this which is the Registered Park and Garden.

6.16.2 The potential buried structural remains of Bute East Dock (GGAT01979s) would be of moderate local significance as evidence of the former industrial heritage of Butetown and an example of Victorian hydro-engineering. The relocated Norwegian Church (GGAT00813s) is of high local significance as a distinctive building within the Cardiff Bay landscape.

6.16.3 The extent of the Roman Road RR621-20 (Castell Collen to Cardiff) would be of regional significance as evidence of the potential location for the Roman harbour and associated transport links.

6.16.4 All other buried or former Heritage Assets are no longer extant and are therefore of negligible significance.

7. POTENTIAL IMPACT OF PROPOSED DEVELOPMENT

7.1 Archaeological Impact

7.1.1 The Site is shown from historic mapping to overlie the south end of the Bute East Dock, with the edge of the Dock and the associated lock shown present in the southwest of the Site. The extent to which the Dock was dismantled prior to infill is unknown, therefore there is the potential for structures or features such as lock gates to remain and thereby be severely impacted by the proposed development. The construction of the Dock likely destroyed any earlier below ground archaeological remains within the Site. However, the potential for paleoenvironmental deposits in the form of peat horizons has been noted nearby and these could be present below the impact horizon of the Post-Medieval development.

7.1.2 Available data suggests there is low potential for below ground archaeological remains within the study area, with the majority of buried or former Heritage Assets being demolished or relocated Post-Medieval standing buildings. The sparsity of known archaeological remains within the study area could be the result of a lack of intrusive investigation as a low number of Events have taken place near the Site. However, the entire area of Butetown was extensively developed during the Post-Medieval period which may have destroyed much of any former archaeological resource.

7.2 Setting Impact

7.2.1 None of the buried or former Heritage Assets identified within the study area remain in situ and therefore have no setting to be impacted.

8. CONCLUSIONS

- 8.1.1 The Archaeological Desk-Based Assessment identified 1 buried or former Heritage Asset within the Site boundary and a further 5 within the study area. The conditions of these assets are recorded as either not known or damaged/destroyed, with 1 having been relocated. Structural elements of the Bute East Dock and associated lock to the Bute East Dock Basin could survive within the southwest part of the Site. The potential for buried archaeological remains pre-dating the Post-Medieval period is low due to the development of the area during the 19th and 20th centuries, however palaeoenvironmental peat horizons could survive below the impact zone of these developments.
- 8.1.2 The proposed development of the Site would have a severe impact on any elements of the Bute East Dock and lock system which remain in-situ. The final decision regarding the recommendation of additional work rests with the Planning Archaeologist at GGAT. However, any loss of remaining historic fabric associated with the Bute East Dock and lock system could be mitigated by investigation as an archaeological evaluation prior to or watching brief during the works.

9. REFERENCES

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10. APPENDICES

Table 1 Summary of buried or former Heritage Assets

PRN	Name	NGR	Period	Type	Broad class	Condition
GGAT01979s	Bute East Dock 'Built in 3 stages between 1835 & 1859. Dock provided over 9,000ft of quayage, with 15 (later 22) coal staithes, allowing loading of 1.5m. tons of coal/annum.'	ST1975	Post Medieval	Dock	Transport	Not Known
GGAT0599s	33-34 Mount Stuart Square, Cardiff '33-34 Mount Stuart Square, Cardiff, possibly shown on First Edition OS map, now demolished.'	ST1889574699	Post Medieval	Dwelling	Domestic	Near Destroyed/Intact/Damaged
GGAT00813s	Norwegian Church 'C19th Norwegian Church near Bute West Dock, one of only two in Wales. It consists of a large square hall, open to the roof, with an aisle to one side which has been lofted over to provide a gallery. Timber structure covered with corrugated iron.'	ST19307477	Post Medieval	Church	Religious, Ritual and Funerary	Unknown
GGAT01100s	2 Bute Crescent 'Former house in Butetown, Cardiff, built around the mid-19th century. It was a three storey mid-terraced building of plain classical proportion. The building was demolished in 1987, and a museum now stands on the site.'	ST19177448	Post Medieval	House	Domestic	Destroyed
GGAT01099s	Mount Stuart Public House, 1 Bute Crescent 'Former public house in Butetown, Cardiff, built around the mid-19th century. It was a three storey corner building of plain classical proportion. The building was demolished in 1987, and a museum now stands on the site.'	ST19177447	Post Medieval	House	Domestic	Destroyed
	Roman Road RR0621-20 Roman Road from Cardiff to Castell Collen.		Roman	Road	Transport	Unknown

Table 2 Summary of Previous Archaeological Works (Events)

PRN	Name	Event Type	Organisation
GGATE000221	NORWEGIAN CHURCH, SURVEY, 1976 'A survey was undertaken in 1976 by E. William of the Welsh Folk Museum at the Norwegian Church, Cardiff, prior to probable demolition.'	Field Survey	Welsh Folk Museum
GGATE001379	WATERFRONTS IN SOUTHEAST WALES: PHASE 1 'GGAT 76 Waterfronts in Southeast Wales. This project aimed to provide a deeper insight in the survival of archaeological remains in waterfront locations, which are increasingly under threat from a range of developments.'	Desk Based Assessment	Glamorgan-Gwent Archaeological Trust (GGAT)
GGATE001487	ARCHAEOLOGICAL IMPLICATIONS OF LAND RECLAMATION AT TREMORFA 'Desk based assessment carried out by GGAT of the archaeological implications of land reclamation at Tremorfa. The report consists of a brief synopsis of previous work relevant to the assessment area, information concerning the known sites within the area, a discussion on the possible effects of the proposed reclamation on the archaeological resource, and a statement concerning further assessment work at Tremorfa.'	Desk Based Assessment	Glamorgan-Gwent Archaeological Trust (GGAT)
GGATE003848	EASTERN BAY LINK ROAD, CARDIFF ARCHAEOLOGICAL DESK-BASED ASSESSMENT 'GGAT were asked to prepare an environmental statement to accompany a planning application for the proposed Eastern Bay Link Road, Cardiff. A potential impact on unknown archaeology both inland and on the foreshore was identified and a sampling strategy recommended.'	Environmental Statement	Glamorgan-Gwent Archaeological Trust (GGAT)
GGATE004423	BUILDING RECORDING OF BETHEL BAPTIST CHURCH, POMEROY STREET 'Archaeology Wales was commissioned by Asbri Planning to undertake an archaeological building recording of Bethel Baptist Church, Pomeroy Street, Cardiff prior to demolition and redevelopment. A series of 115 photographs of the church, plans and records were assembled as well as location plans and a brief history of the site. (Stafford 2013).'	Building Survey	Archaeology Wales

PRN	Name	Event Type	Organisation
GGATE004682	<p>DESK BASED ASSESSMENT OF ROATH BASIN, CARDIFF</p> <p>‘During June 2002, Cotswold Archaeology was commissioned by Wyn Thomas Gordon Lewis on behalf of the Welsh Development Agency to carry out a desk-based assessment of land at the Roath Basin, Cardiff. The results of this project would be used to inform future applications to redevelop the area.</p> <p>The assessment identified a number of Grade II Listed buildings within the development area, concluding that retention of these structures would be preferable during any future development. It also identified the Channel Dry Dock as a potential site of cultural heritage interest. While there may be some potential for the presence of localised peat deposits below the study area, it was thought that the potential for archaeology pre-dating the industrial period was very low, as much of the site comprises land reclaimed from the sea in the 19th century.’</p>	Desk Based Assessment	Cotswold Archaeology
GGATE004683	<p>ROATH BASIN, CARDIFF FIELD VISIT</p> <p>‘Field visit carried out as part of a desk-based assessment of Roath Basin, Cardiff.’</p>	Field Visit	Cotswold Archaeology
GGATE005431	<p>THE RURAL SETTLEMENT OF ROMAN BRITAIN</p> <p>‘The Rural Settlement of Roman Britain project was undertaken by Reading University and Cotswold Archaeology, on behalf of Historic England and the Leverhulme Trust, with the aim of creating a resource that brings together the excavated evidence for the rural settlement of Roman Britain with the over-arching aim to inform a comprehensive reassessment of the countryside of Roman Britain.’</p>	Project	University of Reading
GGATE006100	<p>GGAT150: RAPID COASTLINE ZONE ASSESSMENT</p> <p>‘A series of Rapid Coastline Zone Assessments were undertaken by the Welsh Archaeological Trusts in the 1990s around the whole of the coast of Wales. They have since been used to inform our input into coastline management plans and other conservation measures, but with the advances made elsewhere in methodology and techniques, they are no longer fit for this purpose in the 21st century. The purpose of this project is to bring the existing Rapid Coastline Zone Assessment, carried out in the 1990s, into line with recent assessments in England, where a rolling programme of Rapid Coastline Zone Assessment is still ongoing.’</p>	Project	Glamorgan-Gwent Archaeological Trust (GGAT)

PRN	Name	Event Type	Organisation
GGATE006416	EASTERN BAY LINK ROAD, CARDIFF 'GGAT was commissioned by Dawnus Construction Holdings Ltd to carry out a watching brief between 28 April - 17 June, 2016, on groundworks for the Eastern Bay Link Road, Cardiff, under agreed mitigation measures. Demolition of earlier industrial buildings likely belonging to Castle Mills and Fownes were encountered (sections of brick and stone walling, a backfilled void, a deposit with cabling) but no artefactual finds were made.'	Watching Brief	Glamorgan-Gwent Archaeological Trust (GGAT)

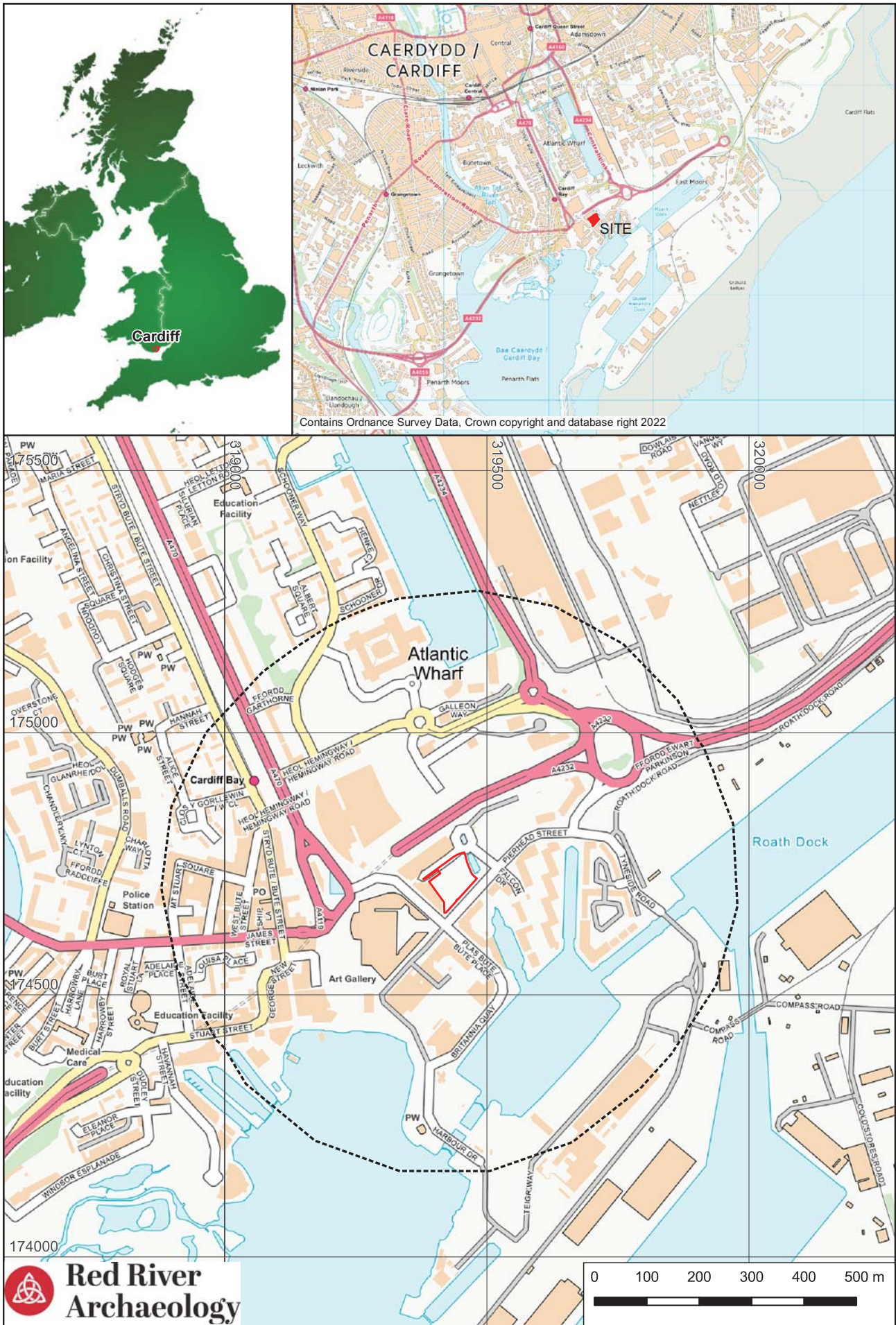


Figure 1 - Site location plan and study area.

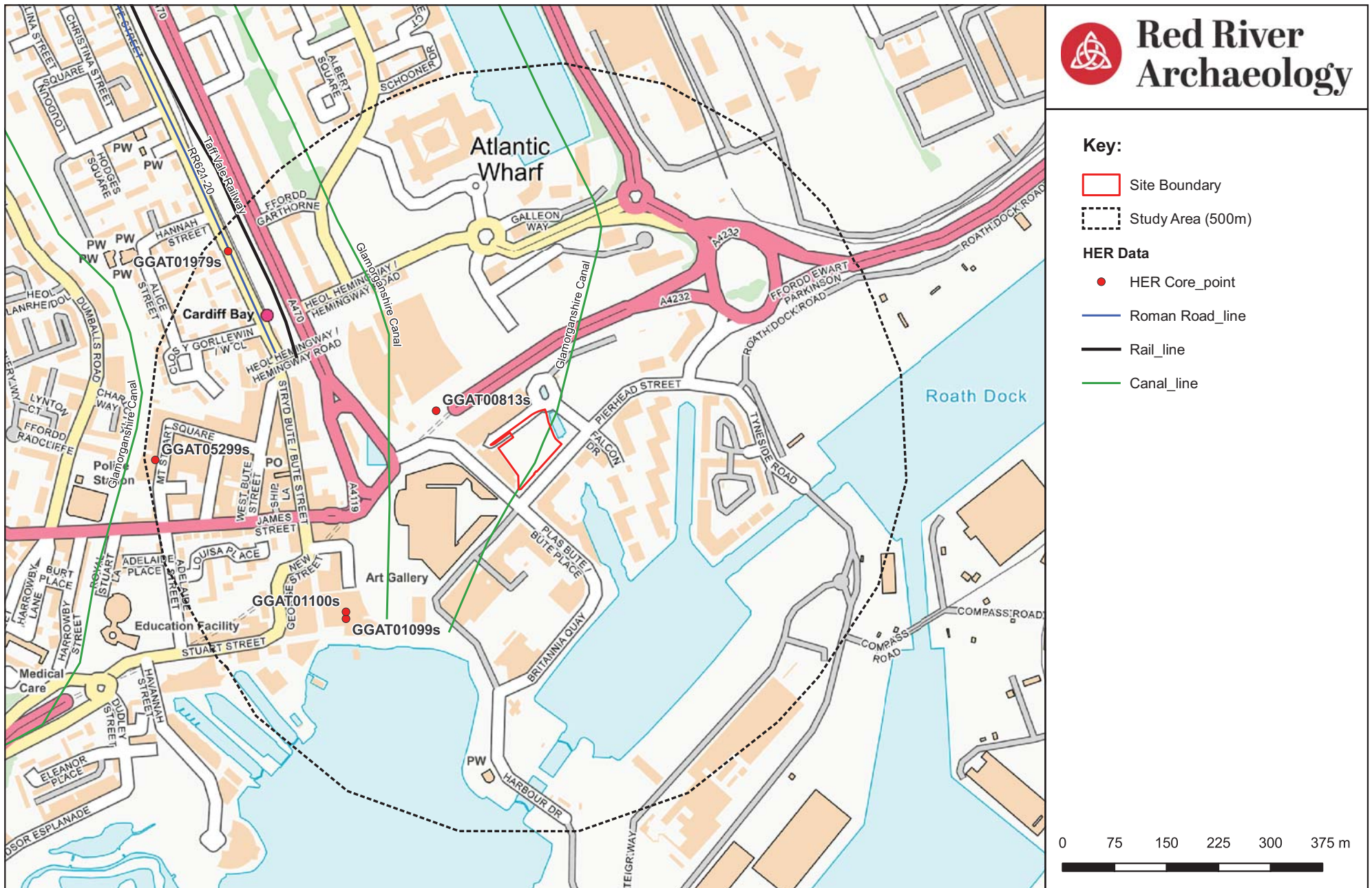


Figure 2 - Buried or Former Heritage Assets within the study area (500m).

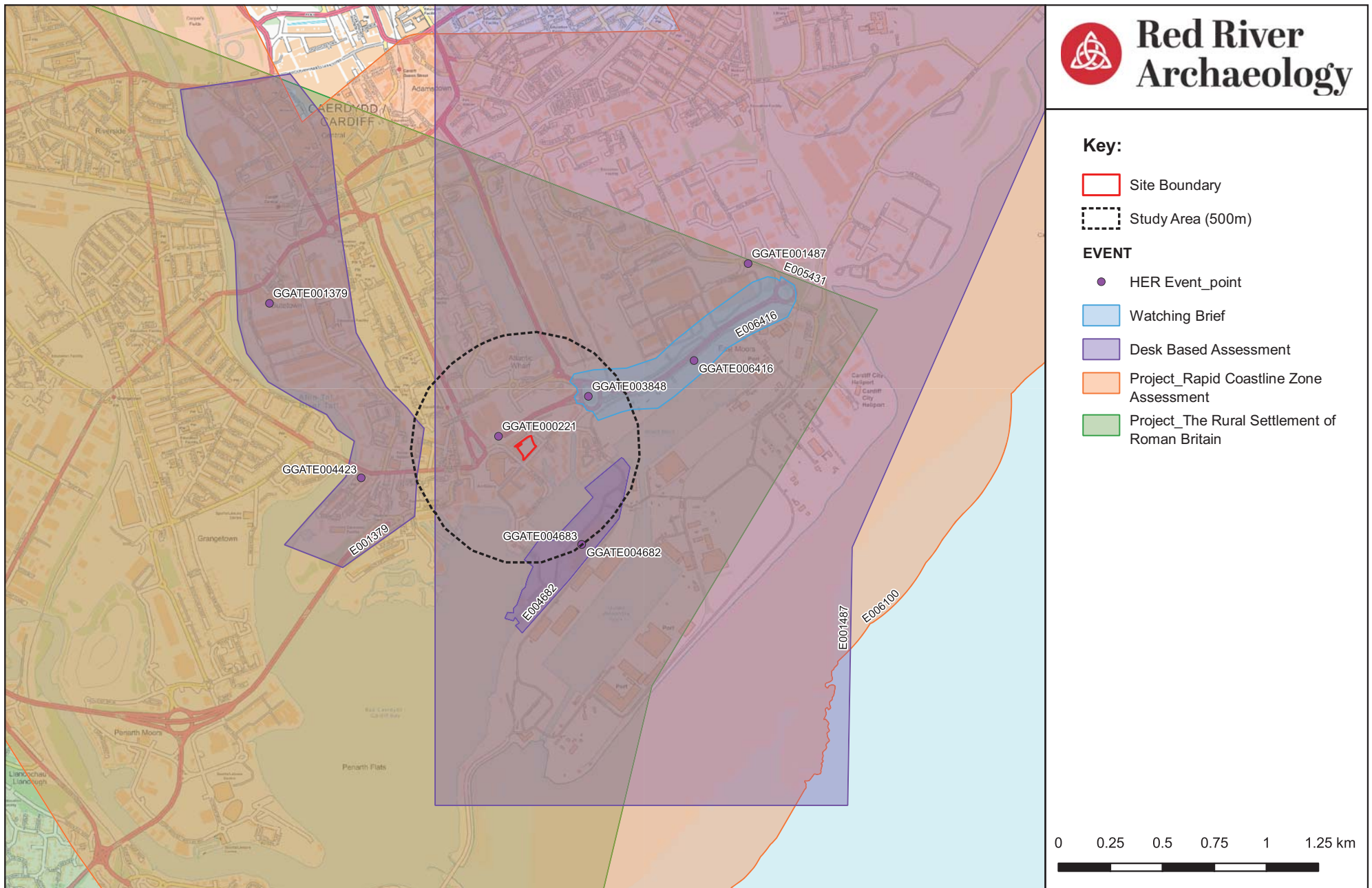


Figure 3 - Previous Archaeological Events within the study area (500m).



Figure 4 - Tithe map (1845) of the parish of Saint Mary, Cardiff, in the county of Glamorgan.



Figure 5 - Glamorgan Sheet XLVII (Surveyed 1878-1879, Published 1885).



Figure 6 - Glamorgan Sheet XLVII.NE (Revised 1898-1899, Published 1901).

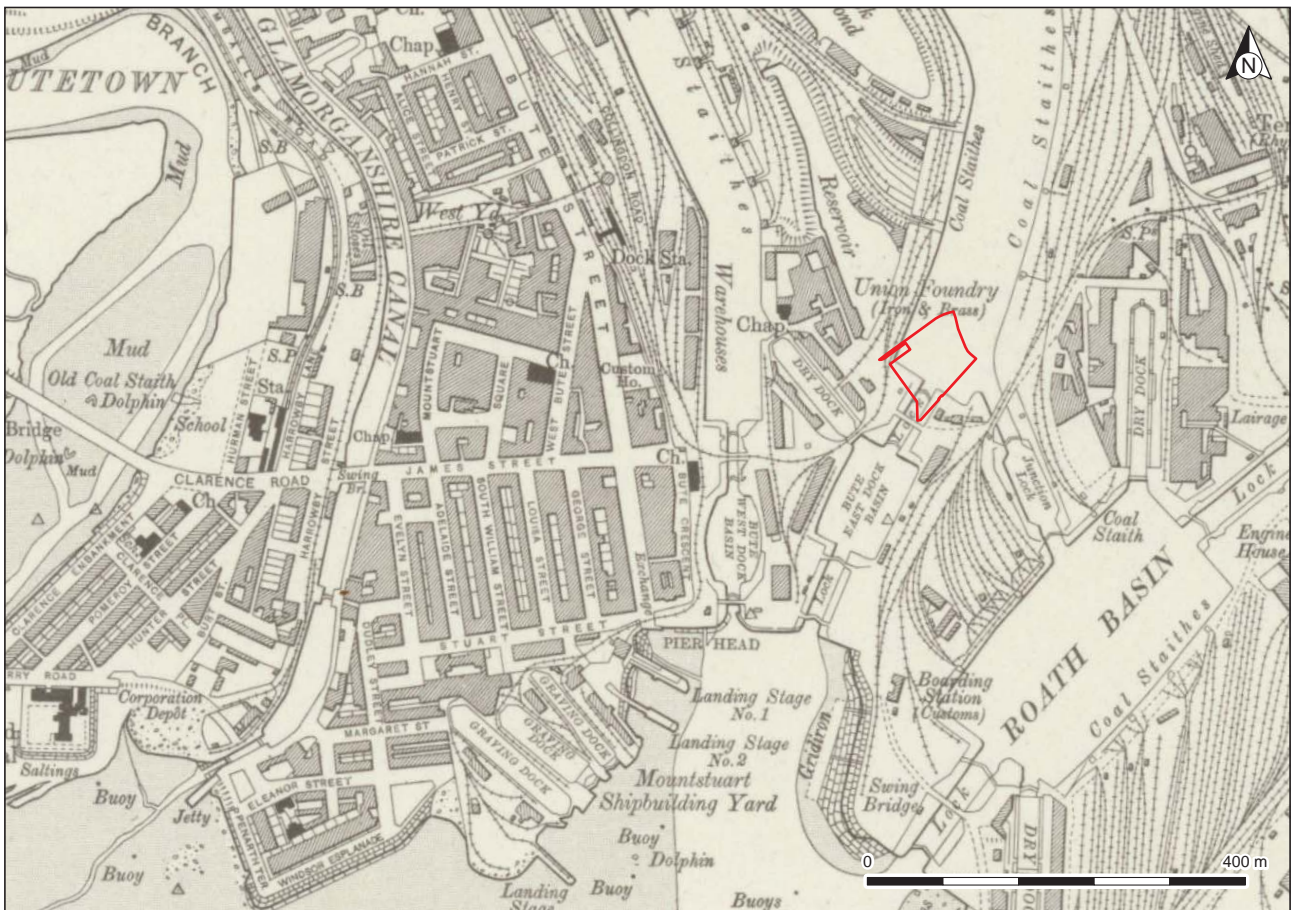


Figure 7 - Glamorgan Sheet XLVII.NE (Revised 1915, Published 1922).

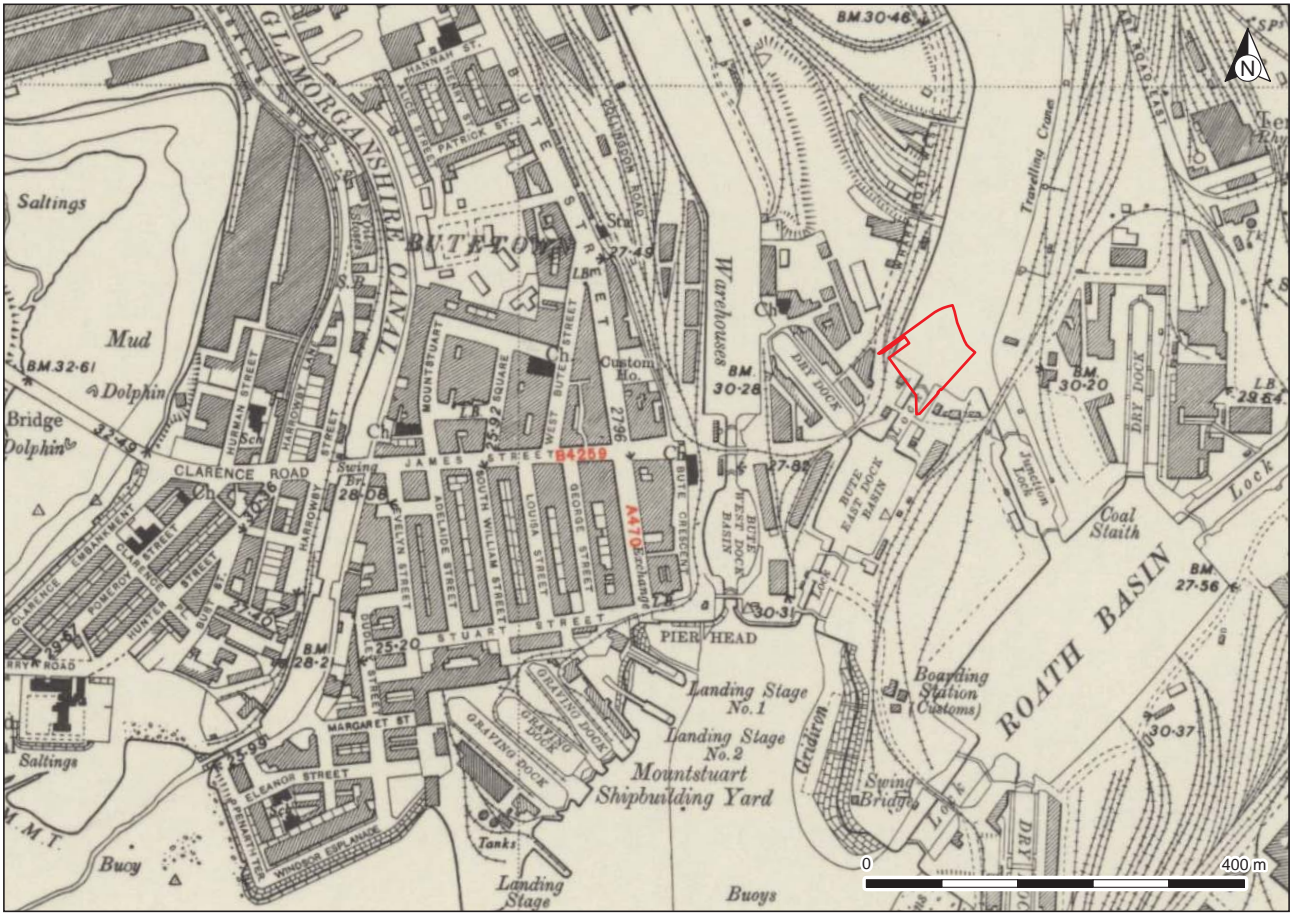


Figure 8 - Glamorgan Sheet XLVII.NE (Revised 1947, Published ca. 1949).



Plate 1 - Overview of Site, looking northeast



Plate 2 - Overview of Site, looking southwest



Plate 3 - Overview of north extent of Site, looking west-southwest



Plate 4 - Overview of north extent of Site, looking east



Plate 5 - Overview of Site, looking west



Plate 6 - Overview of south extent of Site, looking northeast



Plate 7 - Overview of Site, looking southeast



Plate 8 - Overview of southwest of Site, looking northwest