Date/Dyddiad: 23 April 2012

Ask for/Gofynwch am: Mr. S. Ball

Your Ref/Eich Cyf:

Telephone/Rhif ffon: (01446) 704650

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The Vale of Glamorgan Council Dock Office, Barry Docks, Barry CF63 4RT Tel: (01446) 700111

VALE of GLAMORGAN

Cyngor Bro Morgannwg

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www.valeofglamorgan.gov.uk

My Ref/Cyf: P/DC/2009/00946/OUT

e-mail/e-bost: Planning&Transport@valeofglamorgan.gov.uk

Nathaniel Lichfield & Partners, Helmont House. Churchill Way, Cardiff CF10 2HE

BY EMAIL ONLY to Jenny Mitter (jmitter@nlpplanning.com)

Dear Sir,

Town and Country Planning Act, 1990 (as amended)

Planning Permission Reference: 2009/00946/OUT and 2010/00696/FUL Location: Land at Barry Waterfront adjacent to Dock No. 1, Barry

I refer to the above referenced planning permissions approved on 2 March 2012 and 5 September 2011 respectively and the details submitted in respect of the conditions of that permission.

#### ARCHAEOLOGY: 2009/00946/OUT Condition 49 and 2010/00696/FUL 21

I refer to the written scheme of archaeological investigation prepared by GGAT Projects, submitted to meet condition 49 of the above outline planning consent and condition 21 of the above full planning consent.

The submitted scheme of archaeological investigation has been considered by our advisors, GGAT, who advise that it has considered the likely impact of the development on the archaeological resource, meets current professional archaeological standards and is therefore acceptable. However, it should be noted that the submitted scheme does not includes all of the area for which consent has been granted in regard to the outline application and that archaeological site work, possibly including detailed investigation if important structures are revealed and subsequent post-excavation analysis, will be required to be undertaken to fulfil the submitted programme of archaeological investigation.

Accordingly, in accordance with their recommendation, the submitted document is APPROVED as far as it relates to the identified area within the report, with the above conditions partially-discharged, with the applicant not fully discharged from his responsibility to ensure that the work is carried out and that an additional scheme will need to be submitted prior to any development commencing in areas not covered by the current document.

Yours faithfully.

Head of Planning and Transportation

Correspondence is welcomed in Welsh or English/Croesawir Gohebiaeth yn y Gymraeg neu yn Saesneg

Our ref: VOG0822/CNM

#### CURATORIAL DIVISION

Head of Planning & Transportation The Vale of Glamorgan Council Dock Office Barry Docks BARRY CF63 4RT

20<sup>th</sup> April 2012

FAO: Steve Ball

Dear Sir

Re: Develop Vacant Land At Barry Waterfront For Residential (C3), Retail (A1), Cafés, Bars And Restaurants (A3), Hotel (C1) And, Offices (B1). Development Of Vehicular And Pedestrian / Cycle Access Including A New Link Road, Re-Grading Of Site To Form New Site Levels And Associated Infrastructure Works, Parking, Servicing, Landscaping, Public Realm And Public Open Space Provision.

Barry Waterfront, Barry.

Thank you for your e-mail of the 19<sup>th</sup> April and the accompanying written scheme of archaeological investigation prepared by GGAT Projects and submitted to meet condition 49 of the above outline planning consent and condition 21 of the above full planning consent.

The submitted scheme of archaeological investigation has considered the likely impact of the development on the archaeological resource, meets current professional archaeological standards and is therefore acceptable.. However, it should be noted that the submitted scheme does not includes all of the area for which consent has been granted in regard to the outline application and given that archaeological site work, possibly including detailed investigation if important structures are revealed and subsequent post-excavation analysis will be required to be undertaken to fulfil the submitted programme of archaeological investigation we recommend that the applicant should not be fully discharged from his responsibility to ensure that the work is carried out and that an additional scheme will need to be submitted prior to and development commencing in areas not covered by the current document. We therefore recommend that the submitted document is approved and that partial discharge of the appropriate conditions is granted.

If you have any questions or require further advice on this matter please do not hesitate to contact us.

Yours faithfully

Neil Maylan Archaeological Planning Manager











Glamorgan-Gwent Archaeological Trust Limited

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# 2009/00646/OUT - Condition 49 2010/00696/FUL- Condition 21



#### The Quays, Barry Waterfront, Vale of Glamorgan

## **Archaeological Written Scheme of Investigation**

Prepared for Barratt Homes (South Wales). Taylor Wimpey and Persimmon Homes (East Wales)

by

The Glamorgan-Gwent Archaeological Trust Ltd

November 2011

Project No P1527 Report No. 2011/086 NGR ST11120 67086



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	archaeological interest outside the development area but inside the study area
	are shown blue

#### **Summary**

Full planning consent, with conditions, has been granted to Barratt Homes (South Wales), Taylor Wimpey and Persimmon Homes (East Wales) (from here referred to as the Consortium) for site re-grading, remediation of contamination and the construction of a link road to Barry Island at Land at Barry Waterfront adjacent to Dock No. 1, Barry, Vale of Glamorgan (Pl App No 2010/00696/FUL).

In order to ensure that the site is fully preserved by record Condition 21 of the planning permission states, 'No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work for that phase in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the Local Planning Authority.'

The Consortium have commissioned the Glamorgan-Gwent Archaeological Trust Projects Division to prepare this Written Scheme of Investigation (WSI), which forms the subject of the present report. The scheme has been devised on the basis of existing knowledge.

The scheme allows for a Level 1 building survey (English Heritage 2006) to be conducted on the standing remains of the Warehouse (BW34) prior to the commencement of the works, as well as an archaeological watching-brief during groundwork and ground remediation within the development area (except in the north of Arno Quay and the southeast of West Pond due to low archaeological potential (Bowen 2009); figure 2), excavations in the area of the Pump House at East Quay, and the installation of drainage runs through the Dock Wall/Revetment at four as yet unidentified locations This scheme includes an in-built facility to record any unforeseen remains.

Significant features, which cannot be recorded within the context of the on-going development programme, will be temporarily protected to allow more detailed recording to be undertaken. A report on the fieldwork will be produced, and archaeological and historical sources consulted, in order to place the results of the fieldwork in an appropriate archaeological and historical framework.

The archaeological works will be carried out to the professional standards laid down by the Institute for Archaeologists.

#### Acknowledgments

The project was managed by Richard Lewis BA MIfA (Head of Projects) and the report was researched and prepared by Leonora Goldsmith BA (Project Archaeologist) of the Glamorgan-Gwent Archaeological Trust, Projects Division (GGAT Projects). The author would like to thank Neil Maylan (GGAT Curatorial).

#### **Copyright notice**

The copyright of this report is held by Glamorgan-Gwent Archaeological Trust Ltd; GGAT Projects has granted an exclusive licence to Barratt Homes (South Wales), Taylor Wimpey and Persimmon Homes (East Wales) to use and reproduce the material it contains. Ordnance Survey maps are reproduced under licence (AL10005976), unless otherwise stated. Annotations are GGAT copyright.

#### 1 Introduction

#### 1.1 Development proposal and planning background

- 1.1.1 Full planning consent, with conditions, has been granted to Barratt Homes (South Wales), Taylor Wimpey and Persimmon Homes (East Wales) (from here referred to as the Consortium) for site re-grading, remediation of contamination and the construction of a link road to Barry Island at Land at Barry Waterfront adjacent to Dock No. 1, Barry, Vale of Glamorgan (Pl App No 2010/00696/FUL) (Figure 1).
- 1.1.2 In order to ensure that the site is fully preserved by record Condition 21 of the planning permission states, 'No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work for that phase in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the Local Planning Authority.'
- 1.1.3 The Glamorgan-Gwent Archaeological Trust Ltd (GGAT Projects) has been commissioned by the Consortium to prepare the required archaeological Written Scheme of Investigation (WSI) for submission to the Local Planning Authority, which will provide the framework for the archaeological works. The WSI forms the subject of the present report.

#### 1.2 Site location

- 1.2.1 The proposed development is located at NGR ST 11120 67086 on the site of Land at Barry Waterfront adjacent to Dock No. 1, Barry, Vale of Glamorgan (see Figure 1). The town of Barry lies on the southeastern edge of the Vale of Glamorgan, on the northern coast of the Bristol Channel. The proposed development areas are Arno Quay and West Pond (see Figure 2). Further information regarding individual sites can be found in Bowen 2009.
- 1.2.2 The West Pond area is bordered to the southwest by a stretch of the A4055 and the railway line to Barry Island. The ground surface is grassed and relatively flat, however, there are a number of rubble tips and a gravel path runs through the centre. At the southeastern edge of the development area are the derelict remains of a Warehouse (BW34) (Bowen 2009).

#### 1.3 Specific archaeological and historical background

- 1.3.1 A polished Neolithic Axe (00565s) found in the Docks suggests early human activity in the area. The accuracy of the artefact's location within the docks is imprecise. However, there is clear evidence for prehistoric occupation in the surrounding area, in the form of burial mounds and domestic settlement, namely at Barry Island and the Atlantic Trading Estate (Bowen 2009).
- 1.3.2 Increasing demands of the coal export industry in the mid 19th century led to the identification of Barry as a suitable site for docks and a railway. Coal shipments from Cardiff had risen to over eight million tons a year causing

serious congestion. A number of attempts were made to develop the area but the plans were met with much opposition, and lacking in sufficient financial support, they failed. Eventually an act of Parliament was passed in 1884 establishing the Barry Dock and Railway Company. David Davies, among others, planned to make a modern port at Barry with rail connections to the coalfields. Davies was the owner of Ocean Collieries and had also been involved in the construction of other local railways (Barrie 1980, 125). Financial backing from his colleagues lead to the first dock opening in July 1889, followed by the railway (BW31) and culminated with the completion of the Docks Office (02152s/34235/LB13443) in 1898/9 (Bowen 2009).

- 1.3.3 Coal was exported to markets all over the world. The port was at the height of its prosperity from the opening of the first dock until 1914. Initially coal exports began at 3,000,000 tons per annum and rose to a world record of 11,000,000 tons in 1913. It has been said that no place in Wales developed so rapidly, which is clear in the population growth from 500 in 1881 to 33,763 in 1911. In 1896, only one third to a quarter of the population of 20,000 were Welsh, demonstrating the influx of immigrant workers taking advantage of the boom (Luxton 1984, Bowen 2009).
- 1.3.4 In its heyday the most characteristic features of the docks were the coal hoists or tips. The hoist consisted of a metal and wood framework designed to receive a loaded coal wagon, which could be raised up and tilted to unload its contents into the hold of ship by way of a coal chute. The hoists protruded from the dock edge into the water. There were two kinds of hoist: low-level and high-level. The northern quay of Dock No. 1, and the newer docks, used high-level tips, which raised the wagons to the required height via an embankment. Machinery such as the tips, cranes and dock gates were all driven by hydraulic power, and a number of Hydraulic Pump Houses are recorded within the development area. However a considerable amount of manpower was also required, particularly to operate the tips and ensure every yard of storage capacity was filled (Prothero 1984, Bowen 2009).
- 1.3.5 The Graving Docks at East Quay and Bailey's Graving docks were probably the biggest employers in the docks. The large Pump House (BW01) was once fitted with equipment that was capable of pumping 118,000 gallons of water per minute and was one of the first businesses on the docks to have its lighting powered by electricity (Clemett 2003, Bowen 2009).
- 1.3.6 It can be said that the modern town of Barry owes its existence to the docks. The development of the town itself began during the late 1890s as a result of the influx of construction and dockworkers. The bricks that were used to build the town were mainly supplied by the colliery owners, which proved to be rather lucrative as the clay used was a waste product of coal mining (Clemett 1998). As a result of the expansion of the town, the parish villages of Cadoxton and Merthyr Dyfan became assimilated into Barry, resulting in the modern settlement visible today (Lewis and Hudson 2006). The First World War saw a decline in trade and subsequent building, a trend repeated following the conclusion of the Second World War in 1945 (Bowen 2009).

#### 1.4 Previous investigations and potential for remains

- 1.4.1 The development area lies within a landscape of archaeological complexity, with important remains of all periods. Substantial evidence exists to provide an indication of the archaeological potential (Bowen 2009). There is likelihood for encountering archaeologically significant remains of prehistoric, Roman, Early-medieval, medieval and Post-medieval date in the course of the development.
- 1.4.2 A number of archaeological investigations have been carried out in the study area, namely at Paget Road, Nell's Point and Barry Island Pleasure Park, although the Historic Environment Record documents no archaeological work in the development area itself. During the Paget Road field evaluation, less than 200m south of the West Pond development area, a sherd of 13th century pottery, fragments of burnt daub, animal bone and charcoal were recovered (Howell 2001). Material likely to be associated with a medieval structure that was excavated to the east (Fox 1936) was also found. However, an archaeological field evaluation at Barry Island Pleasure Park in 2009 provided very little positive archaeological evidence (Tuck 2009, Bowen 2009).
- 1.4.3 The development work involving groundworks in the surcharging areas of Arno Quay and West Pond are likely to encounter archaeological remains of an industrial nature. Development in the surcharging East Quay, Castle Land Quay, Arno Quay and West Pond and the excavation of 15m³ of contaminated soil in Arno Quay are likely to encounter alluvial deposits known to preserve archaeological remains of prehistoric and later period. Alluvial deposits in the southern part of the site have been encountered up to 3.5m in depth (excepting the south-eastern area where alluvial deposits were found to be absent). Geotechnical works have also indicated alluvial deposits across West Pond (up to 21.4m in depth). Alluvium was found to be absent in the north of Arno Quay, and remediation works during the 1900's removed foundations and subsurface structures from approximately 1m below the current ground surface and shaped the current landform (Bowen 2009).

#### 2 Mitigation assessment

#### 2.1 Nature of effect

- 2.1.1 It is proposed to re-grade the site which will involve the raising of ground levels by 0.9m to mitigate flood risk, with residual post construction settlement expected to exceed 200mm across the West Pond without ground improvement measures. In order to avoid this residual settlement, it is intended to surcharge these areas with additional fill for a period of time (requiring c.40,000m³ material excavated from on-site borrow pits).
- 2.1.2 Remediation of contamination is proposed including extraction (via a network of ground water pumping wells and filters) and disposal at a specialist facility of 650m<sup>3</sup> of Hydrocarbon free product on West Pond.
- 2.1.3 A link road is to be constructed consisting of approximately 900m of new highway to Barry Island from Fford y Mileniwm, with six main junctions and a spur providing access to The Mole.
- 2.1.4 Drainage works are proposed including the diversion of an existing foul water rising main with a minimum depth of cover to be 1.2m from finished ground levels.

#### 2.2 Assessment of potential impact

- 2.2.1 Without appropriate forms of mitigation, the following development activities are deemed likely to have a potential impact on the archaeological resource:
  - Ground remediation
  - Demolition and removal of subterranean infrastructure relating to former use of the site (i.e. building foundations).
  - Topsoil/site stripping
  - Construction of site compounds
  - Excavation and reduction of present ground levels
  - Piling
  - The excavation of service trenches
  - Other intrusive groundworks (i.e. landscaping, drainage etc)

#### 2.3 Mitigation Strategy

2.3.1 The strategy is proposed on the basis of the likely extent and form of archaeological interests and the proposed extent and form of development effect.

- 2.3.2 The effect of the development on potential archaeological interests during the activities defined in section 2.2.1, will be mitigated by conducting a Level 1 building survey (English Heritage 2006) on the standing remains of the Warehouse (BW34), prior to the commencement of any construction works. Furthermore an archaeological watching brief will be carried out during ground intrusion works to the method set out in Section 4.3.
- 2.3.3 Under normal circumstances it should be possible to record archaeological remains that are discovered within the construction programme, although additional time may be required if significant unexpected discoveries are made.
- 2.3.4 In the event that a significant discovery is made that cannot be recorded within the construction programme, contingency arrangements should be made to modify the construction programme and isolate the area of interest to allow its safe and effective investigation and recording (see section 4.2.4).
- 2.3.5 In the event that the contingency arrangements are not of sufficient scope, a meeting should be convened in order to agree an appropriate strategy (see section 4.2.5).
- 2.3.6 All material removed during the construction phase will be conserved and stored on site under suitable conditions, with the exception of any masonry and concrete removed during the course of the construction works. As a minimum the material will be stored using neutral material, and packaged with silica gel (which will be regularly changed on a six monthly basis).
- 2.3.7 The site archive (including artefacts and ecofacts subject to the agreement of the site owners; excepting those that may be subject to the Treasure Act) will be deposited with an appropriate receiving organisation, in accordance with the ICON and IfA Guidelines (*Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation (2007)*, and subject to the agreement of the legal landowner. A copy of the report and archive index will be deposited with the *National Monuments Record*, RCAHMW, Aberystwyth and the *Regional HER* curated by the Glamorgan-Gwent Archaeological Trust, Swansea.

#### 3 Resourcing

#### 3.1 Staffing

The project staff involved are experienced archaeologists drawn from the team regularly used, these will include:

- Richard Lewis BA MIfA, Head of Projects, responsible for the tracking of the project and maintaining quality
- Project Officer/Assistant Project Officer, responsible for carrying out the watching-brief
- Project Archaeologists (field), responsible for excavation and recording

Additional input is provided by:

- Finds Specialist, responsible for finds recovery policy and arrangement of specialist services
- Project Archaeologists (finds), responsible for cleaning, cataloguing and analysing finds.
- Illustrator, responsible for preparing publication-standard drawings, artistic reconstruction drawings, information boards, leaflets and advertisements.
- Photographer, responsible for developing and printing site photographs

#### 3.2 Specialists

GGAT have a number of established specialist advisers and consultants:

- Faunal remains: Martin Locock (Freelance)
- Roman brick, tile and other ceramic building materials: Dr EM Evans (GGAT)
- Roman glass: Rowena Hart (GGAT)
- Roman pottery: Dr Peter Webster (Centre for Lifelong Learning, Cardiff)
- Roman/later coins: Edward Besly (National Museum of Wales)
- Flint/worked stone: Elizabeth Walker (National Museum of Wales) and Richard Lewis (GGAT)
- Medieval and post-medieval pottery, metalwork and other worked materials: Dr Paul Courtney (Freelance)
- Later post-medieval ceramics: Steve Sell (GGAT)
- Palaeoenvironmental remains: University of Wales Lampeter Archaeological Services (UWLAS)

Further specialist expertise in other disciplines will be obtained as required from suitably qualified individuals/institutions.

#### 4 Mitigation measures and work specifications

#### 4.1 Scope of works

- 4.1.1 A Level 1 building survey will be conducted on the standing remains of the Warehouse (BW34), to the specifications laid out in English Heritage's Understanding Historic Buildings: a guide to good recording practice (2006) and the Institute of Archaeologists Standards and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures 1996 (amended 2001 and 2008).
- 4.1.2 A watching-brief to meet the requirement of the Institute for Archaeologists' *Standard and Guidance for Archaeological Watching Briefs* (1994, as amended 1999) will be undertaken on all the specified groundworks as in section 2.2.1.
- 4.1.3 Any stray finds or deposits of minor interest encountered will be recorded by the archaeologist as the specified construction works proceed.
- 4.1.4 Any deposits of greater significance will be investigated and recorded within a secured area.
- The Glamorgan-Gwent Archaeological Trust's principles governing the treatment of human remains in the care of the Trust are set out in the Trust's Human Remains Policy (2011). Should human remains be encountered, the nature and extent of those remains will be established and recorded, and the coroner informed. However, the remains will be left in situ, with suitable measures in place to ensure their protection during backfilling. circumstances may dictate the need to remove human remains if they are thought to be vulnerable to further damage or obstructive to the broader aims of the work. In such cases, the human remains will be archaeologically recorded and removed under conditions that comply with all current This will include reporting to the relevant authorities, the obtaining of proper licences, and the provision for eventual reburial following appropriate analysis (see 4.3.2). All human remains will be excavated by hand in accordance with the Institute for Archaeologist's Excavation and Post-Excavation Treatment of Cremated and Inhumed Human Remains: Technical Paper Number 13 (1993).
- 4.1.6 The finds, including artefacts and ecofacts, excepting those, which may be subject to the laws of Treasure Act (1996), will be deposited with the same institution, subject to the agreement of the site owners. Agreement with an appropriate Institution to accept this material will need to be made on the completion of fieldwork and assessment of the nature of the finds recovered.
- 4.1.7 A report describing the works carried out and findings made will be prepared and submitted to the local planning authority.

#### 4.2 Method

- 4.2.1 The contractors on site will be notified of the need to allow the site archaeologist conducting the watching-brief reasonable access to their works for the purpose of recording archaeological remains.
- 4.2.2 The contractors will be notified of the need to afford access at all reasonable times to the archaeologist nominated by the Consortium and will allow them to observe the excavations and record any items or finds.
- 4.2.3 The specified groundworks will not be undertaken in the area to which this scheme applies without the presence of the site archaeologist.
- 4.2.4 In the event of particularly significant or complex discoveries being made, those areas will be fenced off and clearly demarked. No machines or contractors will work in such areas until such time as recording has been completed. A contingency involving the deployment of additional personnel and resources to record and remove the remains involved in any such area will be required in this eventuality.
- 4.2.5 In the event that remains are encountered which are of such complexity or significance that the contingency arrangement would not be of sufficient scope, a meeting with the LPA and any other parties that may be relevant to the issue will be convened in order to agree an appropriate strategy.

#### 4.3 Method of recording

- 4.3.1 The techniques employed will conform to best current professional practice. Archaeological deposits will be recorded with a single continuous context numbering system. GGAT will, upon request, submit a copy of its recording forms and manual to the client. Contexts will be drawn at a suitable scale in plan, and, where appropriate, in section. All significant contexts will be photographed in 35mm monochrome film and in digital format, with a minimum resolution of 8mp. Excavations will be located by a site grid and benchmark tied to the Ordnance Survey.
- 4.3.2 All classes of finds will be retained, cleaned, and catalogued until arrangements for final deposition have been agreed, in line with the requirements of the Institute for Archaeologist's Standard and Guidance for the collection, documentation, conservation and research of archaeological materials (2001). If substantial quantities of undiagnostic, residual or modern material are recovered, an on-site recording and discard policy for these classes of find has been devised. All items that may be subject to The Treasure Act 1996 will be reported to the HM Coroner for the local area. If human remains are encountered, they will be archaeologically recorded and removed under conditions, which comply with all current legislation, including reporting to the relevant authorities, the obtaining of proper licences, and the provision for eventual reburial following appropriate analysis. All human remains will be excavated by hand in accordance with the Institute for Archaeologists Excavation and Post-Excavation Treatment of Cremated and Inhumed Human Remains: Technical Paper Number 13 (1993).
- 4.3.3 The management of environmental recording and sampling will follow the principles and tenets laid down in English Heritage's *Guidelines for Environmental Archaeology*, published in 2002. All deposits with a high potential for the preservation of palaeoenvironmental material will be sampled, by column, bulk and other method, for possible subsequent analysis, in accordance with a sampling strategy overseen by a specialist with appropriate expertise. Sampling and recording will be the responsibility of an identified member of the field team with relevant experience.

#### 4.4 Reporting

- 4.4.1 An archive of archaeological records relating to the work will be prepared to the specifications in *Management of Archaeological Projects* (English Heritage, 1991) Appendix III, and the Institute for Archaeologist's *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (2007).
- 4.4.2 Archaeological and historical sources will be consulted, in order to place the results of the fieldwork in an appropriate archaeological and historical framework.
- 4.4.3 Following a review of the potential of the recovered evidence, a programme of analysis and research will be undertaken, resulting in the preparation of a site

- narrative and supporting data, including finished drawings and photographs as necessary.
- 4.4.4 All artefacts recovered during the evaluation will be processed, conserved and packaged according to the Institute for Archaeologist's *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation (2007)*, and the National Museum of Wales guidelines, and in consultation with relevant specialists where necessary.
- 4.4.5 Environmental samples will be processed and analysed, subject to guidance from the relevant specialist.
- 4.4.6 GGAT will identify internal or external specialists who will be responsible for preparing reports on cultural or palaeoenvironmental material, and dating and for overseeing the sampling programme.
- 4.4.7 Any artefacts recovered will be subject to detailed analysis and synthesis into summary reports. The reports will include an assessment of the artefactual assemblages and their potential for further study.
- 4.4.8 An archive of records relating to the preparation of the reports will be prepared to the specifications in *Management of Archaeological Projects* (English Heritage, 1991) Appendix VI, and the Institute for Archaeologist's *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (2007).
- 4.4.9 A report, comprising a synthesis of data gathered, should be submitted upon completion of the fieldwork, together with inclusion of supporting evidence in appendices as appropriate, and illustrations. Two copies of the report will be supplied to the client.
- 4.4.10 Short archaeological digest reports will be submitted for publication in relevant regional, national and thematic learned journals; as a minimum, a report will be submitted to the annual publication of the regional CBA group or equivalent journal.
- 4.4.11 The site archive (including artefacts and ecofacts subject to the agreement of the site owners; excepting those that may be subject to the Treasure Act) will be deposited with an appropriate receiving organisation, in accordance with the ICON and IfA Guidelines (*Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (2007), and subject to the agreement of the legal landowner. A copy of the report and archive index will be deposited with the *National Monuments Record*, RCAHMW, Aberystwyth, and the *Regional Historic Environment Record*, curated by the Glamorgan-Gwent Archaeological Trust, Swansea.

#### 4.5 Insurance

- 4.5.1 GGAT is fully insured for this type of work, and holds substantial Professional Indemnity and Public Liability cover.
  - Employers Liability: Aviva, limit of indemnity £10,000,000.

- Public liability: Aviva, limit of indemnity £5,000,000.
- Professional Indemnity: Towergate, limit of indemnity £1,000,000

#### 4.6 Limitations

- 4.6.1 GGAT will not be liable to indemnify the client against any compensation or damages for or with respect to:
  - Damage to crops, structures etc on the site as a necessary result of the site operations being carried out in accordance with the agreed scope of works (save in so far as permission to enter had not been given to GGAT)
  - The use or occupation of land (which has been provided by the client) for the purpose of carrying out site operations (including consequent losses of crops), or interference whether temporary or permanent with any right of way, light, air or water or other easement or quasi-easement which are the necessary result of the site operations being carried out in accordance with the agreed scope of works.
  - Damage to the site, which is the necessary result of the site operations in accordance with the agreed scope of works.
  - Injuries or damage to persons or property resulting from any act of neglect or breach of statutory duty done or committed by the client or his agents, servants or their contractors or for or in respect of any claims, demands, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto.
  - Any claims for compensation or damages arising from the provision of incorrect or incomplete information to GGAT by or via the client.

#### 4.7 Health and Safety

- 4.7.1 GGAT will not endanger the health, safety and welfare of its employees or others in the execution of its projects. GGAT has prepared a Health and Safety statement in accord with *The Health and Safety at Work etc Act 1974*, a copy of which is both available on request, and will be displayed in any site office, and will be supplied to any other contractors working on site during GGAT operations thereon.
- 4.7.2 Prior to commencement of work, GGAT will carry out a formal Health and Safety Risk Assessment in accordance with *The Management of Health and Safety Regulations 1999*. A copy of the risk assessment will be kept on any site office and be available for inspection on request. GGAT will prepare any documentation required by the *Construction Design and Management Regulations 2007*.
- 4.7.3 GGAT will require access to the health and safety policy of all other contractors and operators present at the work place in compliance with *The Management of Health and Safety Regulations 1999*.
- 4.7.4 In addition to statutory requirements, the GGAT will always follow best practice for Health and Safety in Archaeology as defined in the FAME (Federation of Archaeological Managers and Employers) (formerly SCAUM, Standing Conference of Archaeological Unit Managers) health and safety manual *Health and Safety in Field Archaeology* (2002).

#### 4.8 Quality control

4.8.1 GGAT is an organisation Registered (no 15) with the Institute for Archaeologists and its governing instrument has fully recognised and endorsed the Institute for Archaeologist's Code of Conduct, Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, and other related by-laws, and the Standard and Guidance for archaeological watching briefs, Standard and Guidance For Archaeological Field Evaluation, Standard and Guidance For Archaeological Excavation and the Standard and Guidance For the Archaeological Investigation and Recording of Standing Buildings or Structures currently in force. All employees, whether corporate members of the Institute or not, are expected to adhere to these Codes and Standards as a condition of employment.

#### 4.9 Arbitration

4.9.1 Any dispute or difference arising out of a contract in relation to this work should be referred for a decision in accordance with the Rules of the Chartered Institute of Arbitrators' Arbitration Scheme for the Institute for Archaeologists applying at the date of the agreement.

#### 5 References

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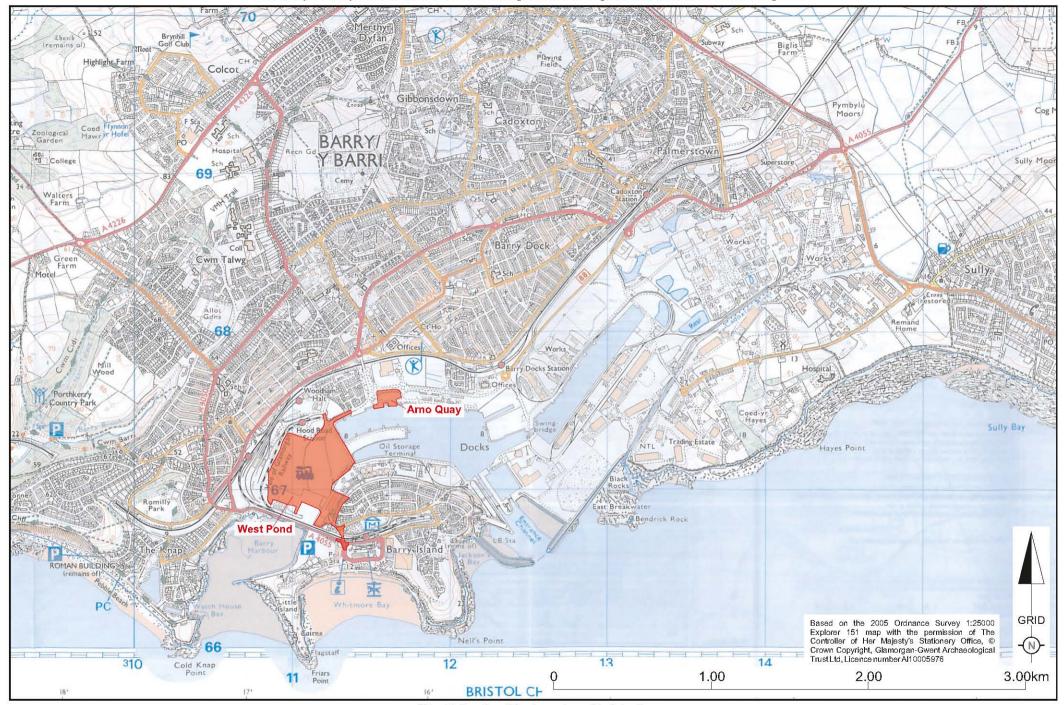
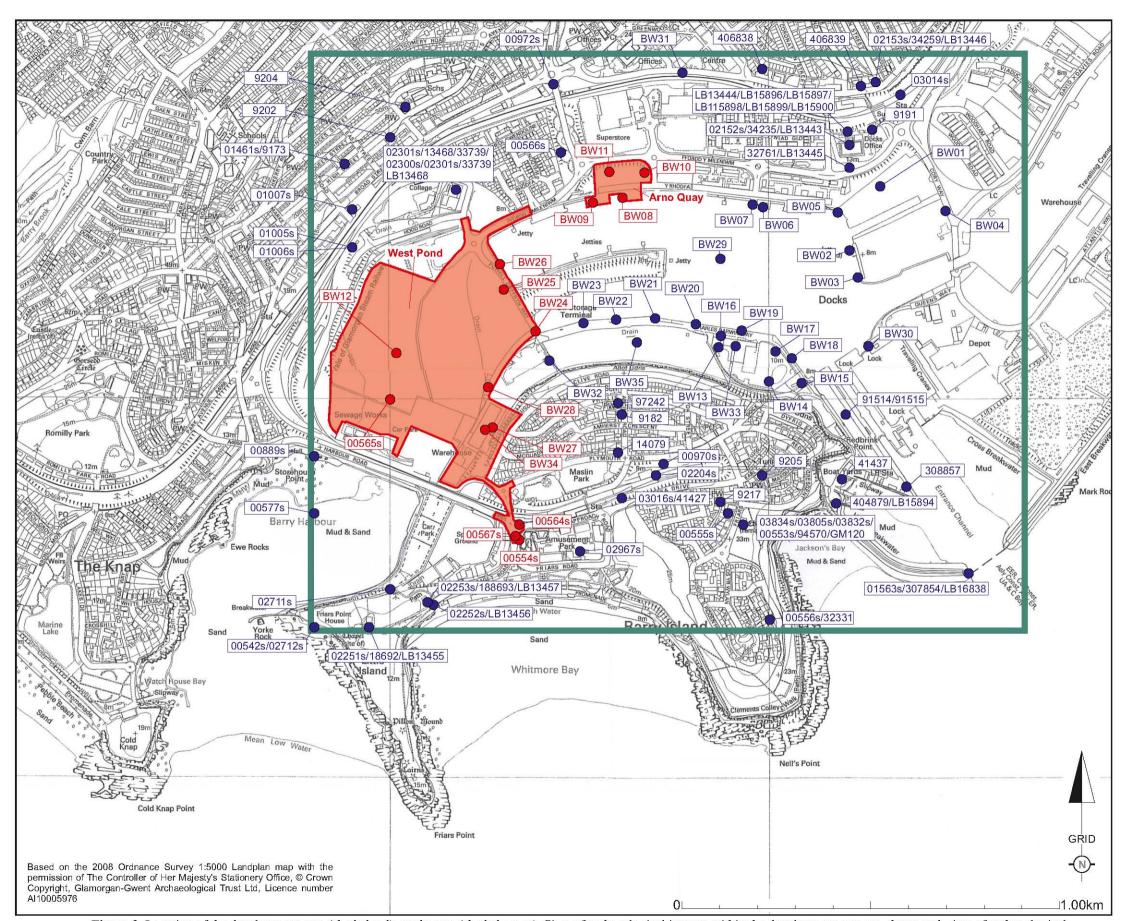


Figure 1. Location of development area (shaded red)



**Figure 2.** Location of the development area (shaded red), study area (shaded green). Sites of archaeological interest within the development area are shown red, sites of archaeological interest outside the development area but inside the study area are shown blue.



### Glamorgan-Gwent Archaeological Trust Ltd (Projects Division)



### **QUALITY CONTROL**

Report Title: The Quays, Barry Waterfront		
Report Date: November 20	<u>1.1</u>	
Report Number: 2011/086		
Report prepared by:	Leonora Goldsmith	
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As part of our desire to provide on the content or presentation	a quality service we would welcome any comments you may wish to make of this report.	

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