

Written Scheme of Investigation for Archaeological Monitoring Cardiff Coastal Defences

Draft

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Contract

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This report describes work commissioned by Cardiff Council, by an instruction dated 11 October 2022. The Client's representative for the contract is Simon Dooley of Cardiff Council. Nika Shilobod and Kristian Evans of JBA Consulting carried out this work.

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1 Introduction

This Written Scheme of Investigation (WSI) has been prepared to fulfil a planning condition (condition 11) on the Cardiff Coastal Defences Scheme (21/02138). The Cardiff Coastal Defences Scheme is a flood alleviation scheme designed to improve and extend coastal and fluvial defences along the coastline between the Dwr Cymru Welsh Water (DCWW) Cardiff East Waste Water Treatment Works (WWTW) to the south-west and eastwards along the coast to the River Rhymney, extending up the west bank of River Rhymney to the Lamby Way Bridge. It is anticipated that the project will prevent breaches of the existing defences, reducing erosion and flooding of critical transport, waste management, and energy infrastructure located immediately landward of the scheme, and of extensive residential and commercial areas in the surrounding hinterland. At the time of writing only the works to the west of the River Rhymney are being brought forward for construction, with the eastern end of the scheme potentially taking place at a later date.

A programme of archaeological mitigation is required, consisting of:

- a walkover survey in advance of ground investigation (GI) works;
- monitoring of GI works;
- walkover surveys in advance of construction following any significant storm events;
- the creation of archaeological exclusion zones to protect assets that will be preserved in situ (PIS);
- archaeological monitoring during ground breaking works in the vicinity of potential buried archaeological remains; and,
- maintenance of a protocol for archaeological discoveries (PAD) during ground breaking works on tidal flat deposits.

The mitigation relating to the GI works is included within a separate WSI (JBA 2023). Following completion of the GI works this WSI should be amended to account for any additional mitigation required based on the results of the archaeological monitoring for that work. At this time both GGAT and RCAHMW should be consulted on the proposed mitigation described within the WSI.

This WSI for archaeological mitigation covers mitigation pre and during construction. It does not address any additional mitigation that may be required. As the current programme of proposed works only encompass the western side of the scheme, those areas of mitigation relating to the eastern side of the scheme will only be completed at the stage those construction works progress.

The document has been prepared with reference to the Historic Environment (Wales) Act 2016 and Planning Policy Wales (Edition 11) (2018), with particular reference to

Chapter Six paragraphs 6.1 to 6.1.32, and Technical Advice Note 24 (TAN 24) (2017):
The Historic Environment.

2 Site Locations and Conditions

The site is located at the mouth of the River Rhymney at Rhymney, Cardiff, Wales and extends over an area of approximately 40ha (Figure 1, Appendix A). The proposed development comprises new fluvial and coastal flood defences along both banks of the River Rhymney from where the A4232 crosses the river down to the confluence of the River and the Severn Estuary. The defences then extend along the Severn Estuary coastline east and west. At the time of writing only the works to the west of the River Rhymney are being brought forward for construction, as shown in Figure 2, Appendix A.

The channel of the Rhymney River is approximately 80m wide and contains extensive inter-tidal mudflats (i.e. exposed at low tide). Within the site in this area the Severn Estuary contains wide, shallow foreshore comprising extensive inter-tidal mudflat and smaller area of fringing saltmarsh habitat. Along the foreshore west of the river is a wide area of rocky rubble material including remnants of building waste (e.g. bricks, slabs, concrete, rebar) eroded from the Frag Tip. To the east of the river a rocky substrate is again present in the foreshore area adjacent to higher ground and includes remnants of earlier rock revetment defences that have failed and eroded.

3 Aim of Archaeological Mitigation

The aim of the proposed archaeological mitigation for the Cardiff Coastal Defence Project is to record the location, extent, date, nature, character and relationships of any surviving archaeological remains where they may be impacted by construction works.

Along with these general aims, more specific aims are to:

- identify, record and characterise all archaeological remains within the area of the groundworks;
- retrieve dating evidence for deposits where possible;
- minimise disturbance to significant archaeological remains if encountered or, if this is unavoidable, to ensure that the remains are investigated and recorded in a controlled archaeological manner;
- record and/or investigate sites which have been identified as likely to be damaged or destroyed in advance of the construction works;
- undertake watching briefs on intrusive groundworks, unless the results of the GI investigations indicate only made ground will be impacted, given the potential for

palaeoenvironmental deposits/features and prehistoric to Roman activity in the vicinity of the development area;

- fence extant archaeological features which are outside of the construction footprint to prevent any accidental damage as a result of construction activities; and
- produce a report detailing the findings of the archaeological mitigation.

The archaeological monitoring will be carried out in accordance with the Chartered Institute for Archaeologists (CIfA) Code of Conduct (2021) and Standard and Guidance for an Archaeological Watching Brief (2020a), with guidance from English Heritage (2011) and Historic England (2015) as required.

The suitability of the watching brief strategy should be kept under continuous review during the site works. Should there be unexpectedly significant or complex discoveries made that warrant, in the professional judgment of the archaeologist on site, more detailed recording than is appropriate within the terms of this WSI, then the scope of this WSI will be reviewed.

No further work will take place in the vicinity of the area until an agreed scheme of mitigation has been devised, the methodology approved, and the mitigation has been implemented to the satisfaction of the archaeological advisor for Glamorgan-Gwent Archaeological Trust (GGAT) and the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW).

Any variations to the WSI will be put in writing by the archaeological contractor either as an addendum to the WSI, or as a new document. This will be approved by the archaeological advisor for GGAT and RCAHMW. The WSI can be managed post-determination, and may be reviewed and updated as the scheme progresses based on incoming data.

4 Proposed Development

The proposed development comprises new fluvial and coastal flood defences along both banks of the River Rhymney from where the A4232 crosses the river down to the confluence between the river and the Severn Estuary. The defences will then extend along the Severn Estuary coastline, east and west from the River Rhymney. This area includes the DCWW Cardiff East WWTW and northwards along the eastern extent of the Lamby Way landfill site (see Figure 1, Appendix A).

The scheme extends over an area of approximately 40ha. To the west of Rhymney River, landward of Rover Way road, land use is a mix of open land, residential land, commercial land, and industrial land. Rover Way itself runs parallel to the coastline and along the western bank of the river. It is an important transport route, linking Cardiff city centre with the eastern suburbs of the city and the A48. Along the

coastline, west of Rover Way, the Celsa steelworks plant is situated with the adjacent area being used for storage of the waste generated by the plant. On the opposite side of Rover Way, the Cardiff Motocross centre operates on the land while further south along the road, DCWW Cardiff East WWTW is located.

5 Archaeological Mitigation Strategy

A programme of archaeological mitigation has been proposed for the scheme in consultation with GGAT and RCAHMW.

Archaeological mitigation will take place both pre-construction and during construction works. The results of the GI will inform the requirement for further archaeological mitigation work, likely manifesting in the form of archaeological monitoring of any ground-breaking potentially impacting tidal flat deposits. To accommodate for these new data, the WSI can be reviewed post-determination and may be revised and updated as the scheme progresses based on incoming data.

Each aspect of the proposed heritage mitigation programme is listed and described in detail separately in the sections below.

6 Archaeological Background

The archaeological and historic background presented below has been informed by the Historic Environment chapter of the Cardiff Coastal Defences Environmental Statement (JBA 2021) and a Desk-Based Assessment produced by GGAT (GGAT 2019). Known heritage assets surviving within the study area of the scheme are shown on Figure 2, Appendix A.

During glacial cold periods, such as the Devensian, the Severn Estuary would have been a normal dryland river valley flood plain, forming part of the territory of hunter-gatherer bands. Evidence for Palaeolithic activity on the Gwent Levels comes from sites such as Sudbrook Point, where several Palaeolithic implements have been discovered. Evidence for human activity on the Severn Estuary continues into the Mesolithic period during which time the Gwent levels would have been dominated by a wet alder woodland. The woodland has resulted in the formation of peat deposits, known from boreholes and deep excavations.

Neolithic activity is evidenced by numerous findspots on the Severn Estuary, including a Neolithic arrowhead at Rumney Great Wharf. A continuation of the use of Neolithic sites into the Bronze Age is evidenced by finds of Bronze Age date at the same location. Within the study area Bronze age activity is evidenced by a side-looped

spearhead (02882s) that was found in an unstratified context on estuarine clay during a field survey.

No heritage assets of Iron Age date were identified within the study area but activity from this period is evidenced on the Gwent Levels by seasonal settlement sites and rectangular wooden structures discovered at Goldcliff.

Roman activity is suggested at Rumney Great Wharf by a number of drainage ditches filled with Roman pottery, daub, bone and iron slag. No records of Roman date were located within the study area.

There is limited evidence dating to the early medieval period relating to the Gwent Levels. Potential evidence of Viking raids is evidenced by placenames such as 'Lamby' which may have a Scandinavian origin. During the medieval period the area formed part of the manor of Rumney and whilst the centre of the manor lay upriver northwest of the scheme activity seems to have occurred at the coast. A medieval mill is located within the study area (02788s) and may be the remains of a mill recorded in the manorial records of 1466.

During the post-medieval period sea defences were constructed along the coast at Rumney including the scheduled relict sea wall (GM474) located some 800m to the east of the scheme. A sea defence of post-medieval date was also identified within the study area comprising a sea defence bank (02812.0s) located north of Splott Moors.

In 1931 an aerodrome was set up on Pengam Moor, to the west of the study area, and by 1936 this was known as the Cardiff Municipal Airport and comprised a number of wooden huts around a grass airstrip. A potential airfield structure (RE008) is located within the study area.

7 Methodology

7.1 Walkover Survey

A walkover survey of the site will be completed prior to construction works beginning so that any extant above ground archaeological remains within the construction footprint of the works can be identified. This would serve to update the previous walkover surveys completed in 2017 and 2020 and provide a new baseline to inform any additional mitigation requirements. If possible the walkover survey should take place following a storm event so that any potential surviving heritage assets would be revealed.

7.2 Archaeological Monitoring

The Desk-Based Assessment identified that there was a low potential across much of the site for previously unknown archaeological remains to survive, and that much of the site consisted of made ground. Two recorded heritage assets have been identified

as potentially surviving within the construction footprint of the greater scheme. These are:

- the modern anti-invasion defence/decoy site (RE007) potentially lies within the footprint of the Location 21 works, though its survival is unclear; and
- a drainage ditch of unknown date (02324s) potentially lies within the footprint of the Location 11 works, its survival is also unclear.

During the construction phase of the scheme there may be impacts on buried archaeological remains associated with these assets as a result of ground-breaking activities. Ground-breaking works in the vicinity of these assets will be monitored by the appointed archaeologist. Topsoil and subsoil will be stripped mechanically using a smooth-bladed ditching bucket, and stockpiled separately at a safe working distance from the excavation areas. If archaeological deposits are identified, the archaeologist will be given time to investigate and record any archaeological material identified to achieve the aims of the watching brief. The machine must be halted should archaeological deposits be encountered. Excavation should be kept to the minimum level required to mitigate the harm caused and to characterise features sufficiently. There should be a presumption towards preservation in situ of all deposits which will not be removed or damaged by ground works. The top of the first significant archaeological horizon may be exposed by machine but will then be cleaned by hand as necessary and inspected for features.

Archaeological recording will typically consist of:

- hand cleaning of sections and surfaces sufficient to establish the stratigraphic sequence exposed;
- environmental sampling;
- the collection of dating evidence from in situ deposits and visual scanning of spoil heaps for dateable artefacts;
- a drawn record at an appropriate scale of representative exposed sections of excavation areas, and plan if appropriate;
- photographs of exposed deposits within excavation areas, with an appropriate scale, and sufficient photographs to establish the setting of the groundworks undertaken; and
- a record of the datum, AOD, levels of the archaeological deposits.

Archaeological features and deposits will be recorded according to the normal principles of stratigraphic excavation. The stratigraphy of each feature will be recorded by means of a written, drawn and photographic record using pro forma context record sheets. If no features are identified, the stratigraphy of each foundation trench, or monitored area, will be recorded in a written description and photographic records.

All excavated deposits will be fully recorded by detailed written context records giving details of their location, composition, dimensions, shape, any relationships, finds and samples. The records will be cross-referenced to other elements of the record and any

other relevant contexts. A Harris matrix will be produced where complex stratigraphy is present.

Archaeological monitoring shall cease when excavations have reached construction depth or the natural substrate, whichever is encountered first.

7.3 Protocol for Archaeological Discoveries (PAD)

An archaeological protocol will be implemented to cover all construction works that impact on tidal flat deposits. The intertidal nature of the construction area means that it is not conducive to a more normal watching brief methodology. The tidal flats are not easily accessible for pedestrians and there are health and safety concerns associated with accessing the intertidal areas. The intertidal nature of this area will mean that archaeological monitoring will also be restricted due to the constant water ingress into the excavated areas and the monitoring will occur only if deemed safe to do so.

A number of Nominated Contacts will be appointed from amongst the senior staff of the contractor who will be responsible for notifying the appointed archaeological contractor regarding all archaeological matters during construction works. The Nominated Contacts should have the appropriate level of competence to carry out this role.

The name and contact details of the Nominated Contacts will be given to all staff via an approved toolbox talk formulated by the Archaeological Contractor. The toolbox talk shall draw to the attention of staff the potential for archaeological material to be found in the course of the project and inform of the possible importance of such finds. The toolbox talk will be presented to the Main Contractor, Nominated Contracts and senior site staff before work commences. A copy of the tool-box talk should always be on site and available in a digital format.

The success of the protocol requires responses to be taken by the various parties to safeguard the remains of archaeological interest and to avoid unreasonable disruption to commercial operations should they be encountered.

If archaeological features or finds are encountered the Nominated Contact shall be informed and then take the actions necessary to safeguard the remains. Work in that area should cease and a Temporary Exclusion Zone (TEZ) must be established to ensure that the remains are not disturbed until they have been appraised.

7.4 Fencing of Extant Archaeological Features

Two recorded heritage assets are located within the red line boundary of the proposed scheme. These are:

- a modern airfield structure (RE008) that survives as a low lying ruin; and
- a medieval mill (02788s) which does not survive above ground but foundations may exist.

These assets, and any additional assets identified during the course of the walkover survey that have the potential to be impacted by the scheme, should be fenced to protect them from damage by plant movement during construction works.

Assets will be surveyed using industry standard GPS which will then be shared with the contractor before construction. The surveyed boundary will form an exclusion/fenced zone and this will be disseminated to staff on site via a toolbox talk to a responsible nominated contact. Physical demarcation on site may have logistical difficulties and its implementation would be dependent on the significance of the remains encountered and would need to be agreed in consultation with GGAT and included in the Construction Management Plan. If construction activity needs, at a later stage, to access these exclusions zones in a manner that would negatively impact archaeological remains, then, subject to their significance, an amendment to this WSI and methodology would need to be agreed in advance to adequately record those remains, before construction and associated infrastructure could commence in that area.

7.5 Environmental Sampling

Consideration should be given to the potential for further information to be gained through specialist environmental analysis of deposits, scientific dating or the application of scientific techniques to the study of artefacts. A soil sampling programme will be undertaken for the recovery and identification of charred and waterlogged remains, where suitable deposits are identified and considered potentially beneficial. Samples will be taken for scientific dating where necessary for the development of subsequent mitigation strategies. Consideration should be given to the potential for further information to be gained through specialist environmental analysis of deposits, scientific dating or the application of scientific techniques to the study of artefacts.

The recovery and sampling of environmental remains from the site should be undertaken in line with current good practice guidelines and the selection of deposits for sampling should be based on a reasoned justification and in accordance with guidance (Campbell et al. 2011). Sampling will be carried out in consultation with GGAT as appropriate (e.g. dendrochronology, soil micromorphology, monolith samples, C14, OL etc).

The collection and processing of environmental samples will be undertaken in accordance with Historic England guidelines (Campbell et al. 2011). The Archaeological Contractor will engage environmental and soil specialists who will be consulted during the course of the evaluation with regard to the implementation of this sampling programme.

The recovery and sampling of environmental remains from the site should be undertaken in line with current good practice guidelines and the selection of deposits

for sampling should be based on a reasoned justification and in accordance with guidance (Campbell et al. 2011). Soil samples of approximately 40 litres (or 100% of the features if less than this volume) for flotation will be removed from selected contexts. Material removed from site will be stored in appropriate controlled environments.

8 Nomination of a Competent Person/Organisation

The project will appoint an Archaeological Contractor before works commence. The Archaeological Contractor should be a Registered Organisation with ClfA and abide by its Code of Conduct and all its relevant standards and guidance. The archaeologist must be able to demonstrate they have sufficient experience in carrying out this type of work.

CVs of the site staff and the name and contact number for the nominated contacts can be provided in advance of the works should GGAT/RCAHMW wish to view them. The Archaeological Contractor will also be required to produce a method statement/project design which includes details of staffing and any specialists which may be required.

9 Extensive, Significant or Unexpectedly Complex Discoveries

If, in the view of the appropriately qualified archaeologist, significant remains are present that cannot be dealt with during a short suspension of work, a separate phase of mitigation will need to be agreed. If complex or significant archaeological remains are present, work will cease in this area and Cardiff City Council, GGAT and RCAHMW will be informed. No further work will take place in this area until an agreed scheme of mitigation has been devised, the methodology approved, and the mitigation has been implemented to the satisfaction of GGAT and RCAHMW.

10 Health and Safety

Health and safety will take priority over all archaeological matters. All archaeological work must comply with all Health and Safety Legislation. All archaeologists or archaeological organisations undertaking fieldwork or visiting site should ensure that they, or any proposed sub-contractors, are appropriately qualified and adequately insured to undertake such projects. A CSCS card and site induction will be mandatory. The Archaeological Contractor will prepare and abide by a project and site-specific

risk assessment and method statement (RAMS). The contractor providing/operating the mechanical apparatus will need to provide a safe system of work and any required certification for their apparatus for review. These documents and method statements will be submitted to the Principal Contractor for approval prior to works commencing.

11 Recording

In the event of encountering archaeological remains, a sufficient sample of any archaeological features and deposits revealed will be hand excavated in an archaeologically controlled and stratigraphic manner, in order to establish their extent, form, date, function and relationship to other features. A sufficient sample should be investigated to understand the stratigraphic sequence of each feature. Features and their key relationships will be investigated in such a way as to minimise unnecessary destruction. All excavated features and deposits will be fully recorded in accordance with ClfA guidelines (2020a) and using industry standard pro-forma recording sheets. The trenches will not be backfilled before GGAT have been offered the opportunity to inspect them and given the Archaeological Contractor written permission to do so. Any open excavations must be adequately fenced to prevent pedestrian access, with this to be provided by the Principal Contractor.

Context numbers will be assigned to archaeological deposits, remains and features as required. Where assigned, each context will be described in full on a pro-forma context record sheet in accordance with the accepted context record conventions including a 'Harris' matrix where stratified deposits are recorded. Structural remains will also be recorded in elevation.

Archaeological deposits will be recorded using a GPS (minimum accuracy +/- 1cm), with individual features requiring greater detail being hand planned at a larger scale of 1:20. Sections will be drawn to a basic scale of 1:10 or 1:20 depending on the size of the feature. All drawings will be related to Ordnance Datum.

Photographs of the trenches prior to hand excavation and individual archaeological deposits and features will be taken, as well as work in progress and post-excavation shots of groups of features. This will include general views of entire features and of details such as sections as considered necessary. The photographic record will comprise digital photography of not less than 10 megapixels in resolution.

All finds will be collected and handled following the guidance for archaeological materials (ClfA 2020b). Unstratified material will only be retained, if in the professional judgment of the supervising archaeologist it is of interest. Material discarded as a consequence of this policy will be described and quantified in the field. Finds of particular interest or fragility will be retrieved as Small Finds and located on plans. Other finds, such as those within superficial and modern deposits, and/or extensive or discrete deposits, will be collected as Bulk Finds bagged by material type.

12 Human Remains, Artefacts and Treasure

12.1 Human Remains

Should human remains be discovered they will be left in-situ, covered and protected pending notification of the discovery to the county curator and the submission to the Ministry of Justice of an application for excavation. The Archaeological Consultant will coordinate the notification process and the Archaeological Advisor to

GGAT will also be informed. Exhumation of human remains will take place in compliance with environmental health regulations and only with a valid licence from the Ministry of Justice. An osteoarchaeologist will be available to give advice on site. Remains will be removed in accordance with the Burial Act 1857 and the stipulations within the Ministry of Justice exhumation licence.

12.2 Artefacts

All artefacts will be retained for processing and analysis, except unstratified 19th and 20th century material which will be noted and discarded. Artefacts will be collected and bagged by archaeological context. The location of special finds will be recorded in three dimensions. All retained artefacts shall be removed from site for specialist examination and analysis and, if deemed necessary, conservation. Cleaning of objects may take place on site, or upon removal as is deemed appropriate. All recording, cleaning, storage and conservation of finds will be in accordance with the Chartered Institute for Archaeologists Standards and Guidance for the collection, documentation, conservation and research of archaeological materials (2014) and Watkinson and Neal (1997).

12.3 Treasure

Artefacts classified as Treasure under the Treasure Act (1996) will be reported in accordance with the requirements of the Act and the Code of Practice (2002). A Treasure Receipt (obtainable from either the Finds Liaison Officer (FLO) or the DCMS website) must be completed and a report submitted to the Coroner's Office and the FLO within 14 days of understanding the find is Treasure. Any finds must be removed to a safe place; where removal cannot be affected on the same working day as the discovery, suitable security measures must be taken to protect the find(s) from theft.

13 Reporting

A report shall be required within six weeks of the completion of the archaeological works, unless there are significantly complex remains. In these instances, ClifA guidelines allow six months for submission. The report shall be prepared in

accordance with Chartered Institute for Archaeologists (2020a), Campbell et al. (2011), and Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) (WAT 2018). The report will contain the following:

- a non-technical summary of the results of the work;
- an introduction which will include the planning reference number, grid reference and dates when the fieldwork took place;
- site location and description;
- project and planning context;
- historical and archaeological context;
- aims and objectives;
- recording standards;
- recording and monitoring methodology;
- documentary research;
- discussion and conclusions including comparisons with any similar surviving examples;
- a selection of photographs and drawings, including an overall plan of the site accurately identifying the areas monitored, a photo direction plan and contact sheet;
- details of archive location and destination (with accession number, where known), together with a catalogue of what is contained in that archive;
- references; and
- appended written scheme of investigation.

Copies of the report will be submitted to the commissioning body, the HER and uploaded to the Archaeological Data Service (ADS) (also in PDF format), along with the photographic record in jpeg format and contact sheet. The requirements for archive preparation and deposition will be addressed and undertaken in a manner agreed with the recipient museum. In this instance National Museum Cardiff (Amgueddfa Genedlaethol Caerdydd) is recommended, and an agreed allowance should be made for the curation and storage of this material. Provision for the analysis and publication of the results will be dependent on subsequent phases of mitigation and consultation with the client, GGAT and RCAHMW.

The owner of the Intellectual Property Rights (IPR) in the information and documentation arising from the work, would grant a licence to the local authority and the museum accepting the archive to use such documentation for their statutory functions and provide copies to third parties as an incidental to such functions. Under the Environmental Information Regulations 2005 (EIR), such documentation is required to be made available to enquirers if it meets the test of public interest. Any information disclosure issues would be resolved between the client and JBA before completion of the work. EIR requirements do not affect IPR.

14 Monitoring

Monitoring does not and should not take the place of proper self-regulation. The project will be monitored as necessary and practicable by GGAT in their role as curator of the region's archaeology and RCAHMW as a statutory consultee for marine licence applications. The representatives of GGAT and RCAHMW will be afforded access to the site at any reasonable time, provided that it is safe to do so, and . subject to the requirements of the Principal Contractor's health and safety policy. Visits can be agreed in advance by notifying the Nominated Contact.

15 Archive and HER Enhancement

In accordance with the requirements of this WSI, the digital archive relating to any archaeological discoveries will be deposited with the GGAT Historic Environment Record, along with the National Monuments Record, RCAHMW, including a copy of the final report. The digital archive will include all written, drawn, survey and photographic records relating directly to the investigations undertaken and reference RCAHMW Guidelines for Digital Archives (2015). A copy of the digital archive only will also be lodged with ADS as a digital archive, including a copy of the final report. The physical archive, including any artefacts, will be deposited with an agreed appropriate regional or national museum.

The site archive will be ordered and compiled with reference to the National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales (NPAAW 2017), Brown 2011 and ClfA Guidance for the creation, compilation, transfer and deposition of archaeological archives (ClfA 2020b). It will be quantified, ordered, indexed and internally consistent. Adequate resources will be provided during fieldwork to ensure that all records are checked and internally consistent.

16 Copyright

Copyright in the documentation prepared by the archaeological contractor and specialist sub-contractors should be the subject of additional licences in favour of the client and the repository accepting the archive, to use such documentation for their statutory and educational functions, and to provide copies to third parties as an incidental to such functions.

17 Resolution of Issues

In the event of issues arising regarding the implementation of this WSI, these will be resolved through contact with the key stakeholders (GGAT, RCAHMW). Should the issue not be resolved remotely, a meeting will be held between key stakeholders to facilitate discussion of the issues and identification of a suitable strategy to be agreed by all parties.

18 Further Information

Further Information or clarification of any aspects of this WSI may be obtained by contacting Kristian Evans at kristian.evans@jbaconsulting.com.

19 References

Brown, D (2011) Archaeological Archives – A guide to best practice in creation, compilation, transfer and curation. Institute for Archaeologists and the Archaeological Archives Forum. 2nd Edition.

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

Campbell, G, Moffett, L and Straker, V (2011) 'Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition)'. Portsmouth: English Heritage

Chartered Institute for Archaeologists (2014) Standards and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.

Chartered Institute for Archaeologists (2020a) Standard and guidance for archaeological field evaluation.

Chartered Institute for Archaeologists (2020b) Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives.

DCMS (2002) Treasure Act 1996, Code of Practice. 2nd Edition.

GGAT (2019) Cardiff Coastal Defences: Desk-Based Assessment.

HMSO (1857) Burial Act.

HMSO (1996) The Treasure Act.

JBA Consulting (2021) Cardiff Coastal Defences: Environmental Statement.

JBA Consulting (2023) Cardiff Coastal Defences Ground Investigations Written Scheme of Investigation.

NPAAW (2017) National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales.

RCAHMW (2015) Guidelines for Digital Archives. Version 1.

WAT (2022) Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)

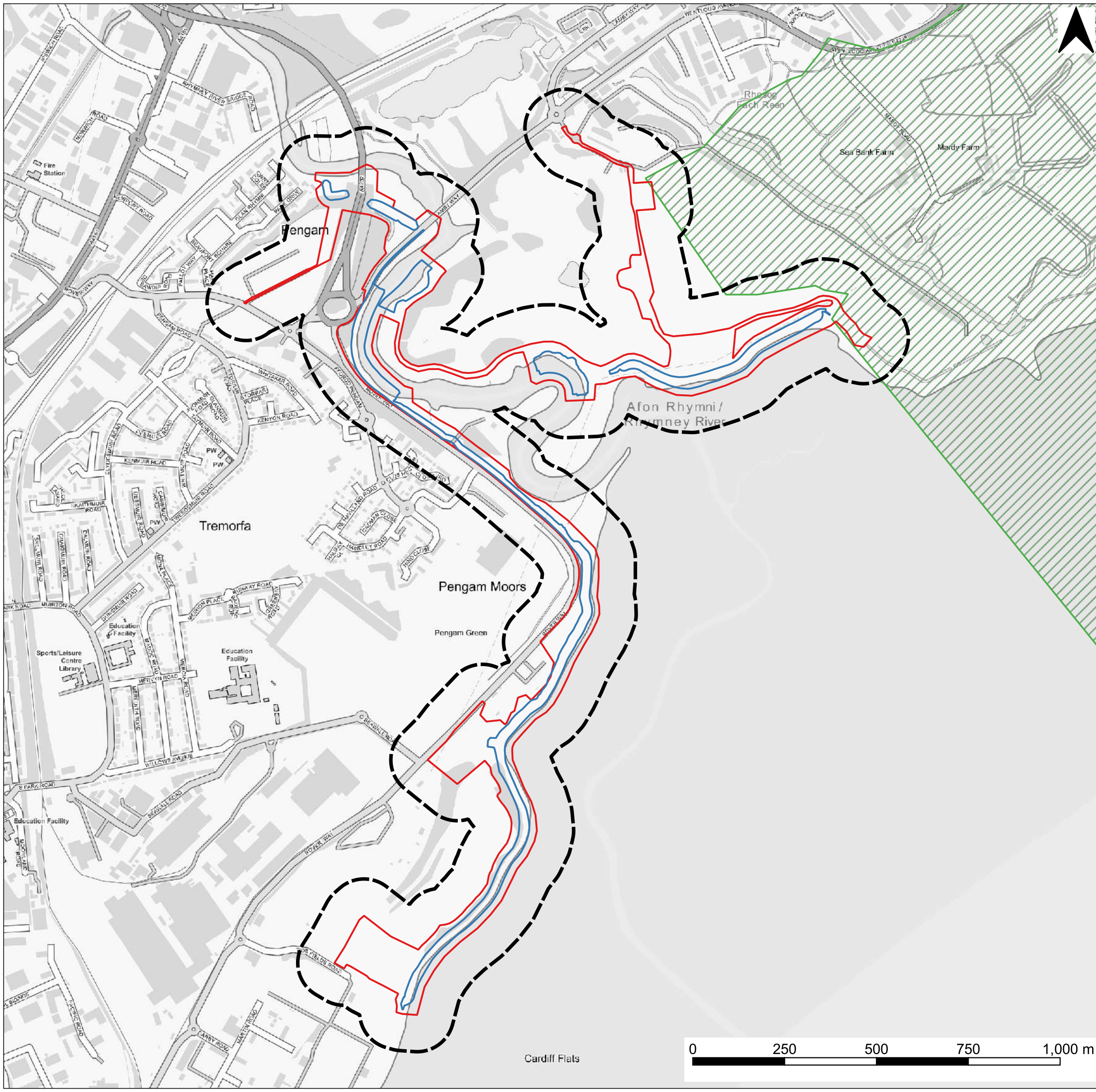
Watkinson, D. and Neal, V. (1997) First aid for finds: practical guide for archaeologists. Rescue and United Kingdom Institute for Conservation Archaeology Section, 3rd Edition.

Welsh Government (2017) Technical Advice Note 24: The Historic Environment.

Welsh Government (2021) Planning Policy Wales Edition 11

A Figures

A.1 Figure 1 - Site Location Plan



KEY

- Red Line Boundary
- 100m Buffer
- Permanent Works Boundary
- Gwent Levels Historic Landscape of Outstanding Historic Interest in Wales

KEY PLAN



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for



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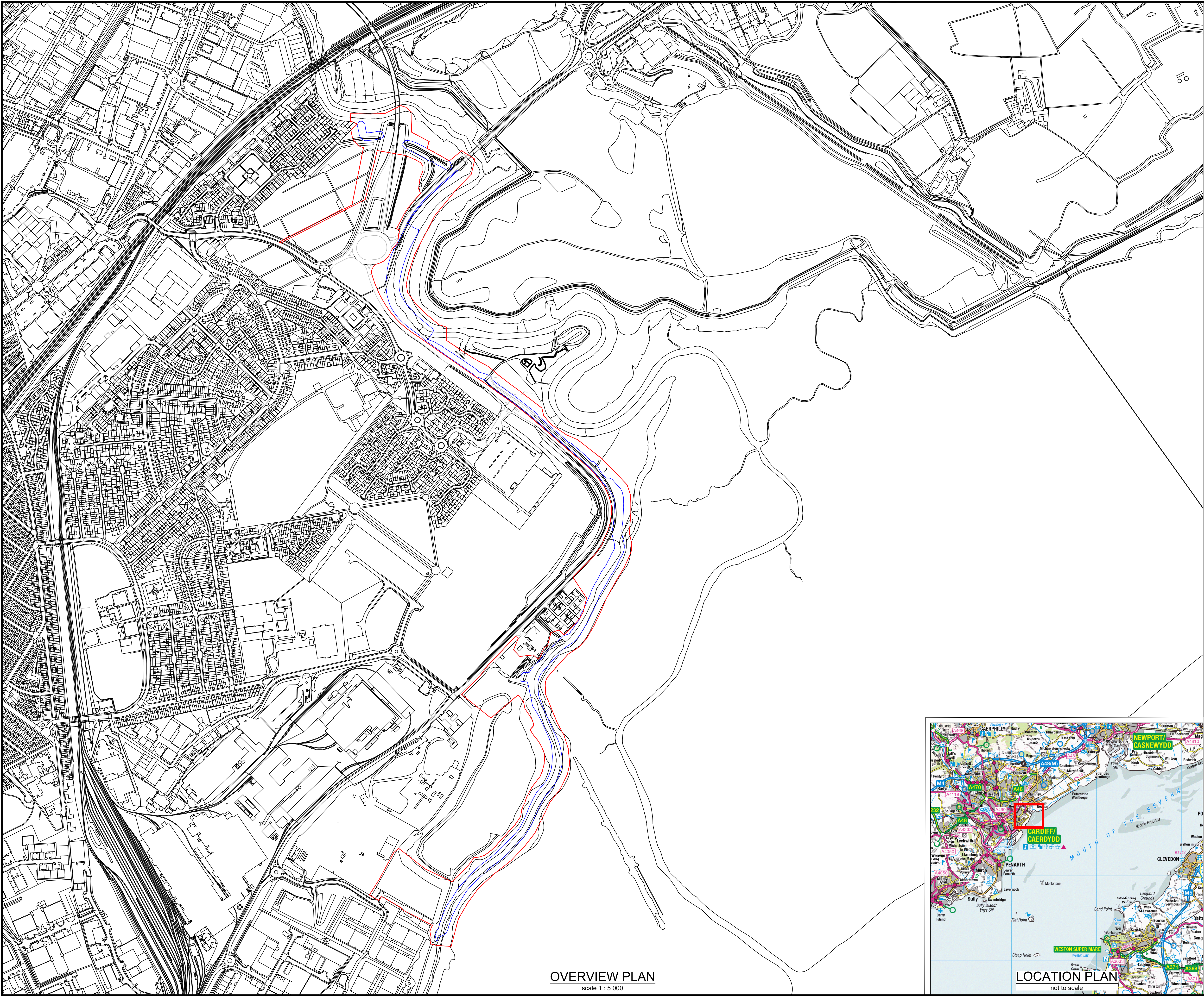
Drawing Title:
2019s0183 - Cardiff Coastal Defences
Figure 1 - Gwent Levels Historic Landscape

Scale:
1:10,000

Drawn by	KE	09/12/2020
Checked by	LM	09/12/2020
Approved by	LM	09/12/2020

0 250 500 750 1,000 m

A.2 Figure 2 - Proposed Works Area



OVERVIEW PLAN
scale 1 : 5 000



- Refer to scheme drawings
- Refer to scheme drawings
- Refer to scheme drawings

Construction Risks	Public Risks	Environmental Risks
In addition to the hazards/risks normally associated with the types of work detailed on this drawing take note of the above. It is assumed that all works detailed on this drawing will be carried out by a competent contractor working, where appropriate, to an appropriate method statement.		
SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION BOX		

- Drawing Notes**
1. Do not scale from this drawing. All dimensions must be checked/verified on site.
 2. Contains Ordnance Survey data

Legend

	Site boundary
	Permanent works boundary

Rev.	Date	Drawn	DP	Designed	DP	Checked	AMM	Approved	AMM
P05 Eastern works removed									
P04 Minor alterations to red line boundary									
P03 Red line boundary and works extent updated									
P02 Added compound areas and widened open coast boundary									
Client Approval									
A - Approved									
B - Approved with Revisions									
C - Do Not Use									
Purpose of issue								Status	
Consenting / licensing								For comment	

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CARDIFF COASTAL DEFENCE

CONSENTING AND LICENSING
OVERVIEW PLAN
WORKS EXTENT AND RED LINE BOUNDARY
for

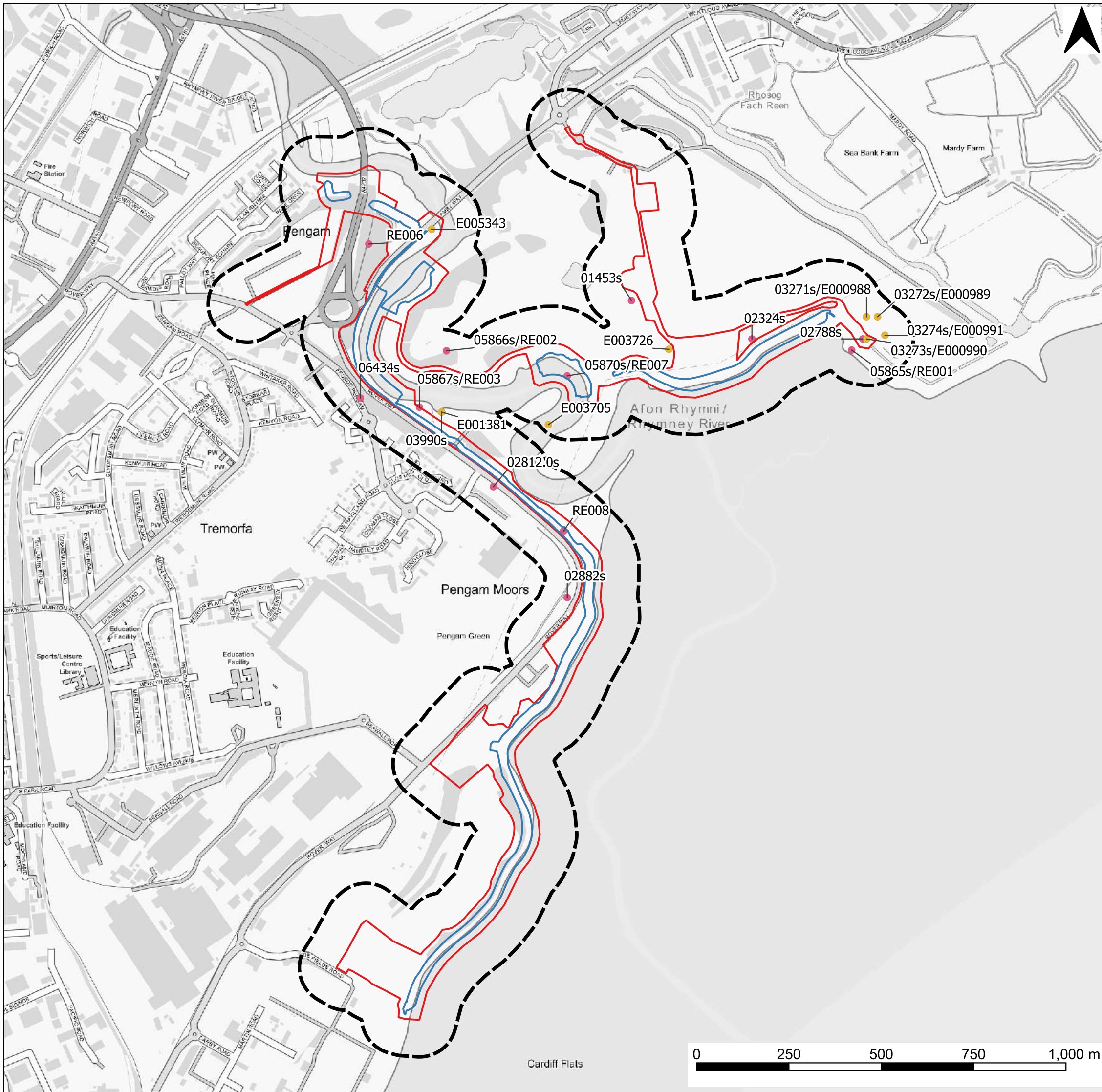


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Scale:	Drawn: R. Groves	15/04/19
	Designed: A. Dane	15/04/19
	Checked:	
	Approved:	

Digital File Name:	ccd-jbau-00-00-dr-en-1001.dwg	Status:	Rev.:
Drawing Number:	CCD-JBAU-00-00-DR-EN-1001	S2	P05

A.3 Figure 3 - Heritage Assets



KEY

- Red Line Boundary
- Permanent Works Boundary
- 100m Buffer
- Heritage Events
- Heritage Assets

KEY PLAN



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Drawing Title:
2019s0183 - Cardiff Coastal Defences
Figure 2 - Heritage Assets and Events

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