OAKFORD ARCHAEOLOGY

# Archaeological monitoring and recording at Pendennis Castle, Falmouth, Cornwall

*on behalf of*
**the client**

**Report No. 22-23**

**Project No. 1927**

**July 2022**

# OAKFORD ARCHAEOLOGY

Archaeological Groundworks and Historic Buildings

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# 1. INTRODUCTION

Archaeological monitoring and recording was carried out by Oakford Archaeology (OA) in June 2022 during works at Pendennis Castle, Falmouth, Cornwall (SW 8252 3174). The work was required as a condition of the grant of scheduled monument consent (S00242167) for the installation of fencing and gates at either end of the track linking One Gun Battery and Half Moon Battery by the Secretary of State for Digital, Culture, Media and Sport, as advised by Historic England (HE).

## 1.1 **The site**

Pendennis Castle (SM 1012134) lies on the southeastern side of the town of Falmouth and is one of the most complete surviving examples of a post-medieval defensive promontory fort in the country. The fortifications (Fig. 1) are situated on a prominent headland that protrudes into Falmouth Bay, and together with St Anthony's Head and St Mawes, guard the entrance to the large natural anchorage of Carrick Roads. The site derives its name from the Old Cornish *penn* and *dinas* meaning fortified headland, and it is probable that the fortifications were built on the site of a possible prehistoric hillfort.

The underlying solid geology consists of sandstone and argillaceous rocks of the Portscatho Formation, a sedimentary bedrock formed approximately 372 to 388 million years ago in the Devonian Period. [1]

## 1.2 **Archaeological and historical background**

Pendennis Castle, along with St Mawes Castle on the opposite side of the Carrick Roads, was built between 1539-43 as part of Henry VIII's national defence policy. The castles were utilitarian artillery towers reinforced by the waterline blockhouses at Little Dennis and St Mawes, and their purpose was to protect the mile-wide inlet of Carrick Roads, one of the largest natural harbours in the country with extensive areas of deep water suitable for mooring large vessels and with enough room for a whole fleet of warships. This, along with the harbour's strategic position at the entrance to the English Channel and the need to prevent raids on the fast developing nearby coastal towns led to their construction. The first governor of the site John Killigrew was obliged to maintain the garrison out of his own pocket.

Following the end of the hostilities with Spain a review of the defences was undertaken between 1597-9. The Henrician keep was strengthened by the addition of the bastioned enceinte and ditch designed by the military engineer Paul Ivey. It is probable that extensions (since removed) were also added at this time to the Governor's quarters and the gatehouse of the main keep. A new outer gatehouse was added to the defensive enclosure in *c.*1611, while, following the outbreak of war with Spain in 1624, a new defensive line with artillery bastions was built across the peninsula.

When the Civil War broke out in 1642, Pendennis and the South West were largely held by the Royalists. A major supply hub and naval base the existing defences of the headland were considered vulnerable, and additional earthwork defences were added. An existing outwork was extensively refurbished by the garrison with the addition of ramparts, a ravelin and hornworks. [2] However, following the Royalist defeat at the battle of Naseby in June 1645 the King's position declined rapidly. The surrender of Bristol in September left Fairfax free to

[1] www.bgs.ac.uk.
[2] Harrington 2004, 45.

subdue the Royalist garrisons of Devon and Dorset. Dartmouth surrendered in January 1646 and Hopton was defeated at the Battle of Great Torrington the following month, while, with Exeter besieged, Fairfax crossed the Tamar in late February 1646. Prince Charles left Pendennis on the 2 March for the Isles of Scilly and continental exile, while St Mawes surrendered almost immediately to the advancing parliamentary forces. Pendennis Castle, under the command of Colonel John Arundel of Trerice however, held out for five months. The garrison surrendered and were granted full honours of war in August 1646, marching out 'with colours flying, trumpets sounding, drums beating, matches lighted at both ends, bullets in their mouths, and every soldier twelve charges of powder'.

Following the end of the Civil War the defences at Pendennis were periodically improved. An additional gun battery was constructed at Crab Quay, to the southeast of the main fortifications, while a new guard barracks and formal gate were built in *c*.1700. In 1714 Colonel Christian Lilly carried out an inspection of the fortifications, finding them 'in a very precarious condition' and noting that 'the body of the fort having been for many years neglected is now in a very ruinous condition'. The parapets had collapsed, the ramparts could easily be scaled, and the ditches were filled with brambles. However, the recommendations were not implemented until the 1730s, when the defences were extensively modernised.

As a result of successive wars with France in the late 18th and early 19th centuries Falmouth became an important naval base and military depot. The landward defences were reinforced, and a new barrack block and other ancillary buildings built inside the fortress, while an additional gun battery was built in *c*.1793 at Half Moon Battery. Decades of inactivity followed the treaty of Versailles in 1815 and despite the brief *rapprochement* with France during the Crimean War, by the late 1850's Britain had once more become suspicious of French intentions. The launching by the French Navy of the ironclad *La Gloire* in November 1859, which rendered all existing coastal batteries obsolete overnight, and the renewed fears of a French invasion led to increased further improvements to improve the outdated defences from the 1880s onwards, including at One Gun Battery/ Bell Bastion and Half Moon Battery, on the southern perimeter of the site. In 1895, one of three breech-loading guns was emplaced at Bell Bastion, with an adjacent underground magazine. This new work, called One Gun Battery, was complimented by similar work for two 6-inch guns at Half Moon Battery; however, the two separate emplacements were considered part of the same battery in terms of manning and orders. [3] Replacing an earlier late 18th century battery, Half Moon was entirely rebuilt in 1894-5 as a battery for two 6-inch breech-loading 'disappearing' guns.

The construction of One Gun Battery in the 1890s at Bell Bastion resulted in the late 16th century enceinte/ rampart and bastions being breached or buried. The track that links Bell Bastion and Half Moon Battery is visible on earlier plans prior to the 19th century alterations taking place, so was not related to that phase of works. A back gate or postern is shown in this area on a plan of 1600, providing access to the lower battery on Pendennis Point. This was originally a narrow gap in the rampart leading to a drawbridge over the ditch (Fig. 2), [4] while a plan made during the Napoleonic Wars shows the opening in the rampart as 'Bridge leading to circular battery'. [5]

During the First World War the Royal Garrison Artillery was reinforced by Territorial soldiers and additional defences built on the landward side. After the war it continued to be

[3] *Pendennis Castle and St Mawes Castle*, English Heritage Guidebook, 2018, 7.
[4] Linzey 2000, 87. It was also described as Back Gate Battery by Lilly in his survey of the site in 1715.
[5] Linzey 2000, 38.

used for training gunners although the 16th century buildings were placed into the guardianship of the Ministry of Works in 1920. By the outbreak of the Second World War longer range artillery was installed, zig-zag trenches dug for protection, and new buildings added across the site. New radar-controlled guns were installed in 1943. After the war, Pendennis initially continued to be used for training, but in 1956 coastal defence was abandoned and the Castle given to the Ministry of Public Buildings and Works (now English Heritage).

## 2. AIMS

The principal aim of the archaeological work is to supervise the excavation of two postholes by the contractors, and to investigate and record any buried archaeological deposits exposed during the groundworks, and to report on the results of the project, as appropriate.

## 3. METHODOLOGY

The work was undertaken in accordance with a Written Scheme of Investigation prepared by OA (2022), submitted to and approved by HE. This document is included as Appendix 1.

Hand excavation was undertaken by the contractors in spits under direct archaeological supervision. Topsoil and underlying deposits were removed to the level of either natural subsoil, or the top of archaeological deposits (whichever was higher). Areas of archaeological survival were then cleaned by hand, investigated and recorded.

The standard OA recording system was employed; stratigraphic information was recorded on *pro-forma* context record sheets and individual trench recording forms, plans and sections for each trench were drawn at a scale of 1:10, 1:20 or 1:50 as appropriate and a detailed black and white print and colour (digital) photographic record was made. Registers were maintained for photographs, drawings and context sheets on *pro forma* sheets.

## 4. RESULTS

A watching brief (Fig. 3, Pls. 1-5) was maintained during works associated with the installation of fencing and gates at either end of the track linking One Gun Battery and Half Moon Battery. The work required the excavation of two postholes measuring approximately 0.3m wide and excavated to a maximum depth of 0.65m.

Excavation of the northern posthole (**Posthole 1**) uncovered a mid yellowish brown clayey silt (100) with frequent subangular local stone fragments at a depth of 0.5m below current ground level. This was overlain by a 0.3m thick layer of homogeneous mid yellowish brown clayey silt (101) with rare inclusions of subangular local stone fragments. Both deposits are interpreted as probable disturbed late 16th century earthen bank or glacis material. Both deposits are truncated (102) along the southwestern edge by later activity containing cementitious mortar (103) with rare granite, coal and shale inclusions. Due to the limited nature of the work, it was not possible to investigate further, and it is unclear whether this deposit was used as bonding material for possible structural remains, perhaps a revetment associated with the deepening of the former narrow passage in the glacis leading to a

drawbridge over the ditch following the building of One Gun and Half-Moon Batteries in 1894-5. These deposits were in turn sealed underneath a mid-brown humic silt topsoil (104)

To the south the excavation of **Posthole 2** exposed a simple deposit sequence of mid yellowish brown clayey silt (200) with frequent inclusions of subangular local stone fragments at a depth of 0.2m below current ground level. This deposit has been interpreted as probable disturbed late 16th century earthen bank or glacis material and was in turn sealed underneath a mid to dark brown clayey silt (201) topsoil.

## 5. CONCLUSIONS

Monitoring of the groundworks undertaken at Pendennis Castle has provided further limited insight into the construction and alterations of the earthen defences on the southeastern side of the site. The small nature of the works didn't permit the identification of clear periods of activity, and it is likely that the majority of deposits identified are related to the late 19th century remodelling of the earlier defences during the construction of One Gun and Half-Moon Batteries in 1894-5.

## 6. PROJECT ARCHIVE

Due to the limited nature of the findings a project archive will not be produced. Details of the investigations, including a copy of this report have been submitted to the on-line archaeological database OASIS (oakforda1-505348).

## ACKNOWLEDGMENTS

This project was commissioned on behalf of English Heritage and administered by Louise Bartlett and Chris Bally (both English Heritage) and Bob Parsons (Parsons Landscapes). Special thanks to Nick Russell (Historic England) who provided advice and support throughout the project. The fieldwork was carried out by Marc Steinmetzer; the illustrations for the report were prepared by Marc Steinmetzer.

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Angove, A. 2021 *Pendennis Headland Footpath Works, Cornwall: Archaeological Watching Brief*. CAU Report No. 2020R093.

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Fig. 1 Location of site

Fig. 2 Detail from the 1734 engraving by Samuel and Nathaniel Buck showing Pendennis Castle with the small back or postern gate in the southeastern circuit leading to the waterside gun batteries between Pendennis Point and Crabb Quay.

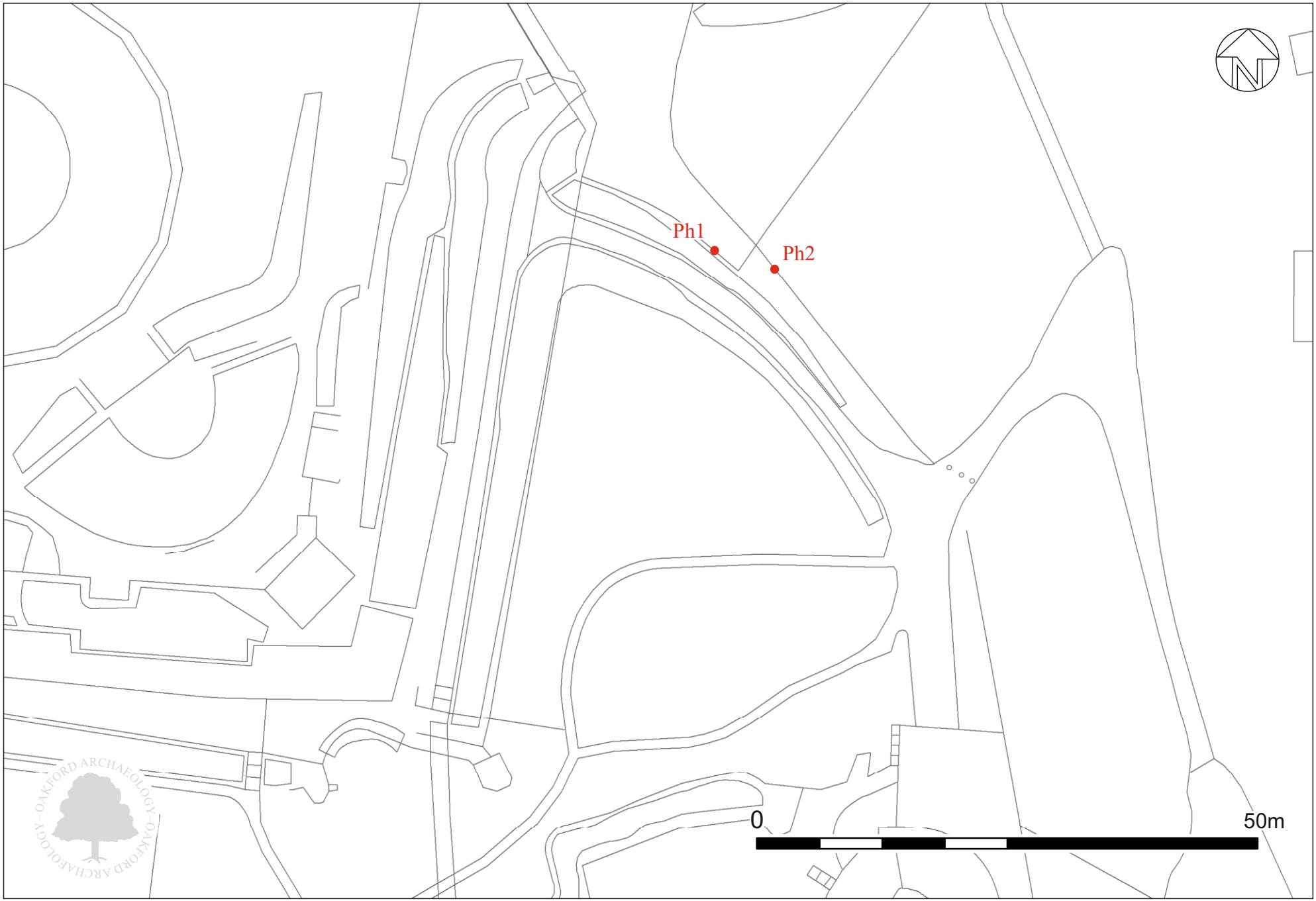

Fig. 3 Plan showing location of observations.

Pl. 1 General view of PH 1 with Pendennis Castle and the late 19th century rebuilt rampart section in the background, and the open passage to the 'bulwark' on Pendennis headland in the foreground. 0.25m scale. Looking west.

Pl. 2 Section through PH 1. 0.25m scale. Looking northwest.

Pl. 3 Section through PH 1. 0.25m scale. Looking southwest.

Pl. 4 General view of PH 2 with Pendennis Castle and the late 19th century rebuilt rampart section in the background, and the open passage to the 'bulwark' on Pendennis headland in the left foreground. 0.25m scale. Looking west.

Pl. 5 Section through PH 2. 0.25m scale. Looking northwest.

# Appendix 1
# Method statement

## 1. BACKGROUND

1.1 This document has been produced by Oakford Archaeology (OA) for the client and sets out the methodology to be used during monitoring and recording at Pendennis Castle, Falmouth, Cornwall (SW 8252 3174). This document represents the 'Written Scheme of Investigation' required under an upcoming grant of scheduled monument consent for the installation of fencing and gates at either end of the track linking One Gun Battery and Half Moon Battery, on the southern perimeter of the site. The work is required by the Secretary of State for Digital, Culture, Media and Sport, as advised by Historic England (HE).

1.2 Pendennis Castle (SM 1012134) lies on the southeastern side of the town of Falmouth and is one of the most complete surviving examples of a post-medieval defensive promontory fort in the country. The fortifications are situated on a prominent headland that protrudes into Falmouth Bay, and together with St Anthony's Head and St Mawes, guard the entrance to the large natural anchorage of Carrick Roads. The site derives its name from the Old Cornish *penn* and *dinas* meaning fortified headland, and it is probable that the fortifications were built on site of possible prehistoric hillfort.

1.3 Pendennis Castle, along with St Mawes Castle on the opposite side of the Carrick Roads, was built between 1539-43 as part of Henry VIII's national defence policy. The castles were utilitarian artillery towers reinforced by the waterline blockhouses at Little Dennis and St Mawes, and their purpose was to protect the mile-wide inlet of Carrick Roads, one of the largest natural harbours in the country with extensive areas of deep water suitable for mooring large vessels and with enough room for a whole fleet of warships. This, along with the harbour's strategic position at the entrance to the English Channel and the need to prevent raids on the fast developing nearby coastal towns led to their construction. The first governor of the site John Killigrew, who, as with other such castles was obliged to maintain the garrison out of his own pocket.

1.4 Following the end of the hostilities with Spain a review of the defences was undertaken between 1597-9 by Sir Walter Raleigh. The Henrician keep was strengthened by the addition of the Italianate bastioned enceinte and ditch designed by the military engineer Paul Ivey. It is probable that extensions (since removed) were also added at this time to the Governor's quarters and the gatehouse of the main keep. A new outer gatehouse was added to the defensive enclosure in *c.*1611, while, following the outbreak of war with Spain in 1624, a new defensive line with artillery bastions was built across the peninsula.

1.5 When the Civil War broke out in 1642, Pendennis and the South West were largely held by the Royalists. A major supply hub and naval base the existing defences of the headland were considered vulnerable, and additional earthwork defences were added. An existing outwork was extensively refurbished by the garrison with the addition of ramparts, a ravelin and hornworks. [1] However, following the Royalist defeat at the battle of Naseby in June 1645 the King's position declined rapidly. The surrender of Bristol in September left Fairfax free to subdue the Royalist garrisons of Devon and Dorset. Dartmouth surrendered in January 1646 and Hopton was defeated at the Battle

[1] Harrington 2004, 45.

of Great Torrington the following month, while, with Exeter besieged, Fairfax crossed the Tamar in late February 1646. Prince Charles left Pendennis on the 2 March for the Isles of Scilly and continental exile, while St Mawes surrendered almost immediately to the advancing parliamentary forces. Pendennis Castle, under the command of Colonel John Arundel of Trerice however, held out for five months. The garrison surrendered and were granted full honours of war in August 1646, marching out 'with colours flying, trumpets sounding, drums beating, matches lighted at both ends, bullets in their mouths, and every soldier twelve charges of powder'.

1.6 Following the end of the Civil War the defences at Pendennis were periodically improved. An additional gun battery was constructed at Crab Quay, to the southeast of the main fortifications, while a new guard barracks and formal gate were built in *c.*1700. In 1714 Colonel Christian Lilly carried out an inspection of the fortifications, finding them 'in a very precarious condition' and noting that 'the body of the fort having been for many years neglected is now in a very ruinous condition'. The parapets had collapsed, the ramparts could easily be scaled, and the ditches were filled with brambles. However, the recommendations were not implemented until the 1730s, when the defences were extensively modernised.

1.7 As a result of successive wars with France in the late 18th and early 19th centuries Falmouth became an important naval base and military depot. The landward defences were reinforced, and a new barrack block and other ancillary buildings built inside the fortress, while an additional gun battery was built in *c.*1793 at Half Moon Battery. Decades of inactivity followed the treaty of Versailles in 1815 and despite the brief *rapprochement* with France during the Crimean War, by the late 1850's Britain had once more become suspicious of French intentions. The launching by the French Navy of the iron-clad *La Gloire* in November 1859, which rendered all existing coastal batteries obsolete overnight, and the renewed fears of a French invasion led to increased further improvements to improve the outdated defences from the 1880s onwards, including at One Gun Battery. These were supplemented in 1885 by an electrically operated minefield laid across Carrick Roads.

1.8 During the First World War the Royal Garrison Artillery was reinforced by Territorial soldiers and additional defences built on the landward side. After the war it continued to be used for training gunners although the 16th century buildings were placed into the guardianship of the Ministry of Works in 1920. By the outbreak of the Second World War longer range artillery was installed, zig-zag trenches dug for protection, and new buildings added across the site. New radar-controlled guns were installed in 1943 and the following year Falmouth played an important role in supporting the D-Day landings. After the war, Pendennis was initially still used for training, but in 1956 coastal defence was abandoned and the Castle given to the Ministry of Public Buildings and Works (now English Heritage).

1.9 The site is located around the area of One Gun Battery/ Bell Bastion and Half Moon Battery, on the southern perimeter of the site. In 1895, one of three breech-loading guns was emplaced at Bell Bastion, with an adjacent underground magazine. This new work, called One Gun Battery, was complimented by similar work for two 6-inch guns at Half Moon Battery; however the two separate emplacements were considered part of the same battery in terms of manning and orders. [2] Replacing an earlier late

[2] *Pendennis Castle and St Mawes Castle,* English Heritage Guidebook, 2018, 7.

18th century battery, Half Moon was entirely rebuilt in 1894-5 as a battery for two 6-inch breech-loading 'disappearing' guns. The magazine survives, its façade located between the two gun positions. Further changes were undertaken during the Second World War, when the gun emplacements were rebuilt, including new gun pits in 1939 and camouflaged concrete gun houses in 1941. The latter were designed to give the gunners protection from aircraft. One of the proposed replacement gates and fencing is located adjacent to the eastern gun house.

1.10 The construction of One Gun Battery in the 1890s at Bell Bastion resulted in the late 16th century enceinte/ rampart and bastions being breached or buried. The track that links Bell Bastion and Half Moon Battery which is the subject of this application is visible on earlier plans prior to the 19th century alterations taking place, so was not related to that phase of works. A back gate or postern is shown in this area on a plan of 1600, providing access to the lower battery on Pendennis Point. This was originally a narrow gap in the rampart leading to a drawbridge over the ditch, [3] while a plan made during the Napoleonic Wars shows the opening in the rampart as 'Bridge leading to circular battery'. [4] It is possible therefore that the proposed groundworks have the potential to expose and destroy archaeological and artefactual deposits associated with post-medieval or earlier activity in the area.

## 2. AIMS

2.1 The aim of the project is to supervise the excavation of the postholes by the contractors, and to investigate and record any buried archaeological deposits exposed during the groundworks, and to report on the results of the project, as appropriate.

## 3. METHOD

The Secretary of State for Digital, Culture, Media and Sport, as advised by HE, has required that a programme of supervision and recording be undertaken during all groundworks, and monitoring will take place on all excavations that are likely to expose archaeological deposits. As set-out in 1.9-1.10 above the works are located on the southern perimeter of the site outside the late 16th century earth parapet and defensive ditch.

3.1 Liaison will be established with the client and their contractor prior to the works commencing, in order to obtain details of the works programme and to advise on OA requirements. If a good working relationship is established at the outset any delays caused by archaeological recording can be kept to a minimum. However, localised delays to site operations may be caused and time should be allowed within the main contractor's programme for the adequate investigation and recording of archaeological material.

3.2 Hand-excavation of the postholes will be carried out by the contractors in spits under direct archaeological supervision and will cease if archaeological deposits are exposed in order to allow those deposits to be investigated, excavated and recorded. This may

[3] Linzey 2000, 87. It was also described as Back Gate Battery by Lilly in his survey of the site in 1715.
[4] Linzey 2000, 38.

cause localised delays to the groundworks programme, although every effort will be made to keep any such delays to a minimum. The spoil will also be examined for the recovery of artefacts.

3.3 If archaeological features are present, then hand-excavation will normally comprise:

- The full excavation of all deposits and/or features within the excavations to formation level;
- Spoil will also be visually examined for the recovery of artefacts during the excavations and scanned by a suitably accredited metal detectorist.

Additional excavation may also be required for the taking of palaeo-environmental samples and the recovery of artefacts.

***General project methods***

3.4 Due to the shallow nature of the excavations it is not anticipated that environmentally sensitive deposits will be encountered during the excavations. If environmental deposits are nonetheless encountered during the works, these will be assessed on site by a suitably qualified archaeologist, with advice as necessary from Allen Environmental Archaeology or the Historic England Regional Science Advisor, to determine the possible yield (if any) of environmental or microfaunal evidence, and its potential for radiocarbon dating. If deposits potential survives, these would be processed by Allen Environmental Archaeology (AEA) using the current HE guidance and Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (Historic England, second edition, August 2011), and outside specialists (AEA) organised to undertake further assessment and analysis as appropriate.

3.5 Initial cleaning, conservation, packaging and any stabilisation or longer-term conservation measures will be undertaken in accordance with relevant professional guidance (specifically 'First Aid for Finds' Watkinson, D and Neal V, (London: Rescue/UKICAS 2001) and CI*f*A 2014 'Standard and guidance for the collection, documentation, conservation and research of archaeological materials') and on advice provided by A Hopper-Bishop, Specialist Services Officer, RAM Museum, Exeter.

3.6 Should artefacts be exposed that fall within the scope of Treasure Act 1996 and The Treasure (Designation) Order 2002, then these will be removed to a safe place and reported to the local coroner, Cornwall Council, the Cornwall Finds Liaison Officer, and HE, according to the procedures relating to the legislation. The location of treasure items will be recorded with an EDM (as per 4.1 above), and, where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.

3.7 Due to the shallow nature of the excavations it is not anticipated that human remains will be encountered during the excavations. Should any articulated human remains nonetheless be exposed; these will initially be left *in situ*. If removal at either this or a later stage in the archaeological works is deemed necessary, these will then be fully excavated and removed from the site subject to the compliance with the relevant Ministry of Justice Licence, which will be obtained by OA on behalf of the client. Any remains will be excavated in accordance with the CI*f*A Standards for Recording

Human Remains (Piers D Mitchell and Megan Brickley, CI*f*A 2017). Where appropriate bulk samples will be collected.

3.8 The project will be organised so that specialist consultants who might be required to conserve artefacts or report on other aspects of the investigations can be called upon (see below). The client will be fully briefed and consulted if there is a requirement to submit material for specialist research.

3.9 Health and Safety requirements will be observed at all times by archaeological staff working on site, particularly when machinery is operating nearby. Personal protective equipment (safety boots, helmets and high visibility vests) will be worn by staff when plant is operating on site. A risk assessment will be prepared prior to work commencing.

3.10 HE will be informed of the start of the project and will monitor progress throughout on behalf of the planning authority. A date of completion of all archaeological site work will be confirmed with HE, and the timescale of the completion of items under section 5 will run from that date.

## 4. ARCHAEOLOGICAL RECORDING

4.1 The standard OA recording system will be employed, consisting of:

- standardised single context record sheets; survey drawings, plans and sections at scales 1:10,1:20, 1:50 as appropriate;
- colour digital photography;
- survey and location of finds, deposits or archaeological features, using EDM surveying equipment and software where appropriate;
- labelling and bagging of finds on site from all excavated levels, post-1800 unstratified pottery may be discarded on site with a small sample retained for dating evidence as required.

## 5. REPORTING AND ARCHIVING

5.1 Considering the scope and likely low impact of the proposed works it is expected that reporting will consist of a completed CC HER entry, including a plan showing location of groundworks and of any features found. The text entry and plan will be produced in an appropriate electronic format suitable for easy incorporation into the HER and sent to HE within 3 months of the date of completion of all archaeological fieldwork.

5.2 In the unlikely event that significant deposits be exposed the results of all phases of archaeological work will be presented within one summary report within three months of the date of completion of all archaeological fieldwork. Any summary report will contain the following elements as appropriate:

- location plan and overall site plans showing the positions of the excavations and the distribution of archaeological features;

- a written description of the exposed features and deposits and a discussion and interpretation of their character and significance in the context of the known history of the site;
- plans and sections at appropriate scales showing the exact location and character of significant archaeological deposits and features;
- a selection of photographs illustrating the principal features and deposits found;
- specialist assessments and reports as appropriate.

5.3 A .pdf version of the report will be produced and distributed to the Client and HE on completion of sitework. A copy of the .pdf version will also be deposited with the Archaeology Data Service (ADS).

5.4 An ordered and integrated site archive will be prepared with reference to *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (2015) upon completion of the project.

The archive will consist of two elements, the artefactual and digital - the latter comprising all born-digital (data images, survey data, digital correspondence, site data collected digitally etc.) and digital copies of the primary site records and images, compiled in accordance with the ADS Guidelines for Depositors (2021).

The digital archive will be deposited with the Archaeology Data Service (ADS) within 6 months of the completion of site work, while the artefactual element will be deposited with the Royal Cornwall Museum (*ref. number pending*). The hardcopy of the archive will be offered to the Royal Cornwall Museum and if not required will be disposed of by OA.

OA will notify HE upon the deposition of the digital archive with the ADS, and the deposition of the material (finds) archive with the Royal Cornwall Museum.

5.5 A .pdf copy of the updated summary report will be submitted, together with the site details, to the national OASIS (Online AccesS to the Index of Archaeological investigationS) database within three months of the completion of site work (oakforda1- 505348).

5.6 A short report summarising the results of the project will be prepared for inclusion within the "round up" section of an appropriate national journal, if merited, within 12 months of the completion of site work.

5.7 Should particularly significant remains, finds and/or deposits be encountered, then these, owing to their importance, are likely to merit wider publication in line with government planning guidance. If such remains are encountered, the publication requirements – including any further analysis that may be necessary – will be confirmed with HE, in consultation with the Client. OA, on behalf of the Client, will then implement publication in accordance with a timescale agreed with the Client and HE. This will be within 12 months of the completion of all phases of archaeological site work unless otherwise agreed in writing.

6. COPYRIGHT

6.1 OA shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved, excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in this document.

## 7. PROJECT ORGANISATION

7.1 The project will be undertaken by suitably qualified and experienced archaeologists, in accordance with the Code of Conduct and relevant standards and guidance of the Chartered Institute for Archaeologists (*Standards and Guidance for an Archaeological Watching Brief*, 2014, revised 2020, the *Standards and Guidance for Archaeological Excavation*, 2014). The project will be managed by Marc Steinmetzer. Oakford Archaeology is managed by a Member of the Chartered Institute for Archaeologists.

### *Health & Safety*

7.2 All monitoring works within this scheme will be carried out in accordance with current *Safe Working Practices (The Health and Safety at Work Act 1974*).

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Johns, C. 1992 *Pendennis Headland. Historical Credentials, Current Condition and Future Potential of the Defences 1540-1956*. CAU Report No. 1992RO12.

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Thorpe, C. 2018 *Pendennis Castle Signage, Falmouth, Cornwall Archaeological Watching Brief*. CAU Report No. 2018R030.


## ADDITIONAL INFORMATION

*Specialists contributors and advisors*
The expertise of the following specialists can be called upon if required:

*Bone artefact analysis: Ian Riddler;*
*Bird remains: Matilda Holmes;*
*Dating techniques: Scottish Universities Environmental Research Centre;*
*Charcoal identification: Dana Challinor;*
*Diatom analysis: Nigel Cameron (UCL);*
*Environmental data: AEA;*
*Faunal remains: Lorraine Higbee (Wessex);*
*Finds conservation: Alison Hopper-Bishop (Exeter Museums);*
*Fish remains: Hannah Russ, Sheila Hamilton-Dyer;*

*Human remains: Charlotte Coles, Mandy Kingdom;*
*Lithic analysis: Linda Hurcombe (Exeter University);*
*Medieval and post-medieval finds: John Allan;*
*Metallurgy: Gill Juleff (Exeter University);*
*Numismatics: Norman Shiel (Exeter);*
*Petrology/geology: Roger Taylor (RAM Museum), Imogen Morris;*
*Plant remains: Lisa Gray;*
*Prehistoric pottery: Henrietta Quinnell (Exeter);*
*Roman finds: Paul Bidwell & associates (Arbeia Roman Fort, South Shields);*
*Others: Wessex Archaeology Specialist Services Team*

**MFR Steinmetzer**
**14 March 2022**
**WSI/OA1927/01**