

Archaeology Wales

Laugharne Castle, Laugharne Carmarthenshire

**Listed Building No.9653
Scheduled Ancient Monument CM003**

Archaeological Evaluation



By Andrew Shobbrook
& Philip Poucher

Report No: 1581

Archaeology Wales Limited
The Reading Room, Town Hall, Great Oak Street
Llanidloes, Powys SY18 6BN
Telephone: 01686 440371
E-mail: admin@arch-wales.co.uk



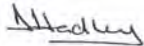
Archaeology Wales

Laugharne Castle, Laugharne, Carmarthenshire

Listed Building No.9653
Scheduled Ancient Monument CM003

Archaeological Evaluation

Prepared For: Cadw

Edited by: Adrian Hadley
Signed: 
Position: Heritage Consultant
Date:

Authorised by: Mark Houliston
Signed: 
Position: Managing Director
Date:

By

By Andrew Shobbrook
& Philip Poucher

Report No. 1581

May 2017

Contents

Non-Technical Summary	1
1. Introduction	2
2. Site Description	2
3. Historical Background	3
4. Methodology	4
5. Results of the Evaluation	5
5.1 Evaluation Trench	5
5.2 Artefactual and Environmental Data	6
6. Conclusions	7
7. Bibliography and References	9
Appendix I	Context List
Appendix II	Finds Catalogue
Appendix III	Written Scheme of Investigation
Appendix IV	Archive Cover Sheet

List of Illustrations

Figure 1	Site location
Figure 2	Site layout plan
Figure 3	Trench location plan
Figure 4	Plan of evaluation trench
Figure 5	Sections of evaluation trench

Photos

Photo 1 – 4	General working and location shots
Photos 5 – 7	Excavation shots of disturbed ground removal
Photos 8 – 10	Excavated slot along southern edge of evaluation trench
Photos 11	Test pit
Photos 12	Working shot of finished excavated level
Photos 13 – 14	Shell pathway (002)

Copyright Notice:

Archaeology Wales Ltd. retain copyright of this report under the Copyright Designs and Patents Act 1988, and have granted a licence to Cadw to use and reproduce the material contained within.

The Ordnance Survey has granted Archaeology Wales Ltd a Copyright Licence (No. 100055111) to reproduce map information; Copyright remains otherwise with the Ordnance Survey.

Non-Technical Summary

In March 2017 Archaeology Wales Ltd (AW) carried out a trenched evaluation over an area of unstable ground located within the inner ward of Laugharne Castle, Carmarthenshire. Recent ground collapse and weakness has occurred within the castle grounds, thought to be the result of rotting tree stumps below ground. This has resulted in an area that is unsafe for public access, therefore Cadw have requested that an archaeological evaluation be undertaken in the area of collapse to investigate the nature of the collapse and the underlying archaeological resource, to enable appropriate mitigation measures to be employed to make the area safe for public access and protect any underlying archaeological deposits.

Laugharne Castle, on the south coast of Carmarthenshire, is a Scheduled Ancient Monument (CM003) and a Grade I Listed Building (No.9653).

The evaluation comprised the archaeological investigation of a single hand excavated trench across the area of ground subsidence, measuring roughly 9m long by 3m wide.

The cause of the subsidence was confirmed as being the result of a large tree stump and roots rotting in situ. These organic remains and surrounding loose soils were removed down to stable ground. The core of the disturbed ground extended across an area approximately 2.5m by 2.5m, and 0.9m below current ground level, with some rooting extending to 1.18m below current ground levels (12.12mOD).

No medieval finds, features or deposits were identified during the course of the excavations. The earliest deposits identified were a series of tipped deposits dating to the 18th century, possibly from a period of clearance and ground levelling work following the slighting of the castle in the mid-17th century. Upper deposits comprised a further series of tipped and levelling deposits, overlaid by garden soils relating to the formal gardens laid out during the 19th century, including a shell pathway.

Subsequent restoration of the ground was undertaken by Cadw ground staff.

1 Introduction

- 1.1 This report has been prepared by Archaeology Wales Ltd (AW) in response to a request from Cadw to undertake an archaeological evaluation on an area of ground subsidence at Laugharne Castle, Carmarthenshire.
- 1.2 The evaluated area lies within the outer ward, to the east of the main castle and adjacent to the easternmost tower. This location is believed to lie on the line of the medieval castle ditch. The area is currently part of the publically accessible gardens, laid in a mixture of formal and informal planting, lawns and shell paths. The area has sunk and holes appeared during routine maintenance works in the area. Initial inspections suggests wood is rotting away underneath the turf covering, believed to be tree stumps, although a larger area of ground surrounding these holes has become unstable.
- 1.3 Cadw have requested an archaeological evaluation of the area of disturbance in order to identify the cause of the disturbance, if possible remove and repair disturbed ground, and record any archaeological features revealed during these works.
- 1.4 A Written Scheme of Investigation (WSI) for the archaeological evaluation was produced by Archaeology Wales and approved by Cadw (see Appendix III). The subsequent evaluation fieldwork used a strategically placed hand excavated trench placed over the area of ground subsidence within the outer ward of Laugharne Castle.
- 1.5 The excavations took place between the 20th and the 25th March 2017. The project was managed by Phil Poucher and the fieldwork carried out under the supervision of Andrew Shobbrook. A site monitoring visit was undertaken by Cadw on the 23rd of March
- 1.6 All work conformed to the ClfA's Standards and Guidance for Archaeological Field Evaluation (2014) and was undertaken by suitably qualified staff to the highest professional standards.
- 1.7 The AW project number for the work is 2510 and the site code is LCC/17/WB. The project details are summarised on the Archive Cover Sheet (Appendix IV).

2 Site Description

- 2.1 Laugharne Castle lies on the banks of the River Coran, overlooking the Taf estuary. It stands on a low cliff in the centre of the village of Laugharne, on the south coast of Carmarthenshire.
- 2.2 Carmarthen lies around 4m (6.4km) along the A40 to the west, Llandeilo lies around 9 miles (14.4km) along the A40 to the east.
- 2.3 The area of proposed investigation lies within the outer ward, to the east of the main castle and adjacent to the easternmost tower. This location is believed to lie on the line of the medieval castle ditch. The area is currently part of the publically accessible gardens, laid in a mixture of formal and informal planting, lawns and shell paths.
- 2.4 The bedrock geology of the area comprises argillaceous rocks, with sandstone and conglomerates also present, of the Milford Haven Group. To the west the lower ground is overlain by diamicton, with tidal flat deposits within the lower lying estuary to the south and east (BGS, 2017).

3 Historical Background

- 3.1 The following historic description is taken from the Specification provided by Cadw, itself taken from Avent 1992.
- 3.2 Laugharne Castle may represent the site of the castle of Robert Courtemain at 'Abercorram', mentioned in 1116. However, the first definite reference to the castle is in 1189 when it was seized by the Lord Rhys, Prince of Deheubarth. The castle was further attacked and destroyed by Llewellyn the Great in 1215 and again taken and burnt in 1257.
- 3.3 The original early 12th century castle was probably a ringwork, traces of an important building with a large hearth have been found during excavations at the site. The castle was remodelled in the 2nd half of the 12th century, partially infilling the interior of the ringwork, with new defences and a large rectangular hall built. When attacked in 1257 the castle was in the hands of the de Brian family, and Guy de Brian (IV) subsequently began improving the castle, starting work on the strong masonry castle visible today. The de Brians remained the lords of Laugharne until the late 14th century, carrying out considerable additions and repairs to the castle during their occupancy. Following the death of Guy de Brian (VII) in 1390 the castle went into decline, with only parts of the castle occupied in the late 15th and early 16th century. In 1575 Elizabeth I granted the castle to Sir John Perrot, who converted the old medieval castle into a comfortable Tudor Mansion, similar to what he did at his main residence in Carew. Perrot died in 1592, and an inventory of that year suggests the repairs he made to the castle were of poor castle, and that the castle was likely to soon fall into ruin once more.
- 3.4 Little of the early castle is clearly visible, as the main hall was demolished and the defensive bank reduced, probably in the late 12th century. More of the late-13th century masonry rebuilding of the castle is visible, and can be seen in the two northern round towers and remains of the curtain wall. The impressive north-western tower, which acted as a keep and defended the entrance through the curtain wall, retains a medieval domed roof, although upper sections of the wall and battlements are more recent reconstructions. The remaining tower is a partly fallen three-storey structure, which had two-storeys and a circular stair added during the Tudor period. A new hall was also built along the south curtain wall in the late-13th century, and the outer ward to the north may also have been added at this time, probably with timber defences. Further strengthening at the end of the 13th century included a projecting gatehouse built over the earlier ditch, and a new round tower in the southwest corner of the inner ward. The defences of the outer ward were also rebuilt in stone. These masonry works were undertaken using red sandstone.
- 3.5 In the mid-14th century further works were undertaken in a distinctive green stone. The southwest corner of the inner ward, including the round tower, were heightened. The southeast corner was also remodelled, with a postern door inserted. The outer gatehouse was also rebuilt.
- 3.6 The Tudor alterations by Sir John Perrot completely remodelled the old hall against the south curtain wall, and heightened the curtain wall with mock battlements. This Tudor hall was since been removed. Ranges of buildings were added to the south and east of the inner ward, and a large accommodation block replaced the curtain wall between the two medieval round towers. The inner gatehouse was also heightened. A central cobbled courtyard with fountain was laid out in the inner ward, with gardens laid out in the outer ward.

- 3.7 Following slighting in the Civil War the castle was left as a romantic ruin during the 18th century. At the turn of the 19th century the outer ward was laid with formal gardens.
- 3.8 The area of proposed investigation lies within the outer ward, to the east of the main castle and adjacent to the easternmost tower. This location is believed to lie on the line of the medieval castle ditch. The area is currently part of the publically accessible gardens, laid in a mixture of formal and informal planting, lawns and shell paths. The area has sunk and holes appeared during routine maintenance works in the area. Initial inspections suggests wood is rotting away underneath the turf covering, believed to be tree stumps, although a larger area of ground surrounding these holes has become unstable. It is possible that these tree stumps may be part of the formal gardens laid out within the outer ward in the 19th century, or potentially during the Tudor period. Extensive excavations have been undertaken at the castle during the 1980s, this area however lies outside the previously excavated areas.

4 Methodology

- 4.1 Prior to the evaluation fieldwork, a Written Scheme of Investigation was produced detailing the methodology for the archaeological evaluation. This was agreed by Polly Groom of Cadw and a copy is included in Appendix III.
- 4.2 A single hand-excavated evaluation trench was placed over the area of subsidence (Figures 2 & 3). The location of the trench was agreed following on-site consultation with Polly Groom of Cadw and the property services manager. The Trench measured 9m long, by 3m wide, and was orientated north-northeast to south-southwest.
- 4.3 Turf and topsoil deposits were removed by hand and stored in an appropriate area adjacent to the evaluation trench. Loose organic material related to the rotting wood was removed along with the topsoil. Care was taken to ensure that only loose material was removed, and that the removal did not potentially disturb underlying archaeological material.
- 4.4 Upon reaching 0.51m below existing ground level a further exploratory test pit was placed within the centre of the trench measuring 1m by 1m square and was excavated for a further 0.50m in depth to investigate further damage caused by deeper subsidence/soft ground.
- 4.5 All areas were subsequently hand cleaned using pointing trowels and hoes to reveal the extent of the voids, organic areas and unstable ground. Deposits were excavated stratigraphically, wherever possible, to prove the presence, or absence, of archaeological features and to determine their significance. The area was excavated to a level where either the first significant archaeological structure or deposit was uncovered, or to stable ground which could then be infilled and made safe.
- 4.6 All areas were hand-cleaned to prove the presence or absence of archaeological features and to determine their significance. Recording was carried out using Archaeology Wales recording systems (pro-forma context sheets, etc), using a continuous number sequence for all contexts.
- 4.7 Context numbers (001) to (017) were allotted during the fieldwork. These contexts are summarised in Appendix I.
- 4.8 Written, drawn and photographic records of an appropriate level of detail were maintained throughout the course of the project. Digital photographs were taken using cameras with a resolution of 10 mega pixels or above.

- 4.9 Plans and sections were drawn to a scale of 1:50, 1:20 and 1:10, as required.
- 4.10 The fieldwork took place between 20th and the 25th March 2017.
- 4.11 A project archive will be prepared in accordance with the National Monuments Record (Wales) agreed structure, as laid out in the project design (Appendix III).

5 Results of the Evaluation

5.1 *Evaluation Trench (Figures 4 & 5; Photos 1-14)*

- 5.1.1 During the evaluation no natural ground was encountered and all deposits recorded comprised of a series of tip lines and landscape gardening features relating to the recent and post medieval periods.
- 5.1.2 Sequentially the earliest deposit found within the confines of the trench comprised a compact mid orangey-brown silty-clay (**deposit 016**), which contained abundant inclusions of small sub-angular stones, small pieces of coal and flecks of mortar. This was encountered at a depth of 1.18m below current ground levels. This deposit is considered to be the remains of a probable redeposited natural clay.
- 5.1.3 Overlying (016) a spread of stones had been deposited (**deposit 015**), which ranged in shape from sub-rounded to sub-angular, and appeared to have been tipped in from the south. The full extent of this deposit was not revealed, but where exposed it was 0.05m thick. This in turn was covered by another layer (**deposit 013**) that appears to have been tipped in from the south. Deposit (013) comprised a mid-brown sandy-clay with no noticeable inclusions, 0.1m thick. Above this lay a more level deposit (**deposit 014**) of fairly compact dark brown-grey silt, containing abundant fragments of mortar and small sub-angular stone inclusions. Oyster shells and animal bone fragments were also found throughout this deposit, and the deposit appears to have been compacted, possibly through trampling.
- 5.1.4 Deposits (016), (015), (013) and (014) were all recorded in the confines of the 1m by 1m exploratory test pit excavated into the base of the evaluation trench.
- 5.1.5 These deposits were overlain by a 0.4m thick deposit of moderately compacted pale brownish-grey gritty silt (**deposit 008**), extending beyond the excavated area. It appears to have been tipped into from the southwest. This deposit was rich in inclusions and contained frequent small flecks of mortar, the occasional larger fragment of lime-mortar, and the occasional fragment of coal and slate. Pieces of post-medieval pottery were also found spread widely throughout this deposit, appearing largely to date to the 18th century, along with what appears to be a Georgian coin. The base of the deposit was recorded at 12.4mOD, 0.9m below current ground levels. Intrusive root action and areas of collapsed ground extended into this deposit, with some further, more minor, root action extending to a depth of 12.12mOD which is 1.18m below current ground levels.
- 5.1.6 This was overlain by a moderately compacted, light to mid yellow clay (**deposit 009**), containing common inclusions of small sub-angular stones. This deposit measured a maximum of 0.30m thick and also appears to have been tipped in from the southwest. This deposit had an uncertain interface with a light to mid greyish-brown silty-clay (**deposit 017**), containing frequent inclusions of mortar flecks, coal and mollusc shells, which lay to the north. Both deposits were 0.3m thick.

- 5.1.7 To the north of these deposits was a moderately compacted dark brown silty-clay (**deposit 011**), with common small sub-angular stone inclusions. This deposit was approximately 0.4m deep, and appeared quite extensive, visible for at least 6.5m north to south. At the southern end of this deposit, close to its interface with deposits (009) and (017), it was heavily affected by intrusive root action. At the southern end this deposit appears to have been partially overlaid by a compacted mid-red silty-clay (**deposit 010**) with abundant inclusions of small sub-rounded and sub-angular stones. However, this interface may have been disturbed through subsequent root action, and the stratigraphic relationship between the two deposits remains uncertain. To the east deposit (011) was overlaid by a similar moderately compacted blackish brown silty-clay (**deposit 012**), 0.3m thick. This too was heavily disturbed through intrusive root action, but appears to represent a garden soil. This deposit runs underneath the current trackway that defines the eastern edge of the excavated area. Fragments of late post-medieval (18th/19th century) brick, glass and clay pipe stem, and a Victorian penny coin were recovered from this deposit.
- 5.1.8 A previous pathway (**deposit 002**) constructed entirely of mollusc shells was revealed running across the excavated area, orientated roughly north-northeast by south-southwest. The path was 0.8m wide, the shell deposit 0.06m thick, and it was laid directly over deposits (010) and (011). Overlying the pathway along the western side of the excavated area was a low curving bank constructed of a moderately compacted black silty clay (**deposit 005**), containing abundant inclusions of mollusc shell, small fragments of coal and late post-medieval (18th/19th century) ceramics. A large wheel rut [**cut 006**] (**fill 007**) cut into the eastern edge of the bank. The rut itself is orientated roughly north south, 0.6m wide. It would appear to relate to modern construction vehicles involved in late-20th century restoration work at the castle. Topsoil (**deposit 001**) covering across the site comprised a turf-covered moderately compacted dark brown silty-clay, which measured up to 0.18m thick.

5.2 *Artefactual and Environmental Data*

- 5.2.1 A total of 58 items were recovered from the evaluation trench, comprising 14 fragments of pottery, 12 fragments of ceramic building material, two fragments of glass, eight metallic objects, five clay pipe stem fragments, two fragments of animal bone and 15 miscellaneous items that included shells, flints, slate and a small porcelain dolls leg. These are listed in the finds summary table (Appendix II).
- 5.2.2 Five deposits contained finds. Stratigraphically, the earliest deposit with finds was deposit (014), recorded within a test pit at the base of the trench. This appeared to represent a layer of trampled dumped material, the trampling suggesting it may have been a working layer. Fragments of oyster shell and animal bone were recovered, likely to represent food waste. Four fragments of slate, along with the mortar inclusions within the deposit, may represent construction or demolition debris. One small copper object was also retrieved, encased in slag or corroding material, which could not be identified.
- 5.2.3 Deposit (008) contained a quantity of finds, and appears to represent a tipped deposit that may have originated from restoration work on the castle and grounds in the 18th century. Five fragments of pottery were recovered, three of which have a general post-medieval date, with two fragments of 18th century Ewenny pottery. Also recovered from this deposit was a Georgian (1714 – 1840) coin, a small loop that appears to be from the back of a button, and possibly gold plated or brass, and part of a lead powder cup, possible 17th to 18th century in

date. Two fragments of clay pipe stem were also recovered, undiagnostic but given the date of the other finds likely to be 18th century in origin.

- 5.2.4 One of the later deposits on the site (012) consisted of a general layer of apparent garden soil, heavily root disturbed in places, but likely to be associated with the laying out and use of formal gardens in the area during the 19th century. No pottery was recovered from this deposit, but a fragment of general late post-medieval bottle glass was retrieved, alongside a Victorian penny coin, a clay pipe stem and an unidentified iron object. A fragment of handmade brick, likely to be 19th century in date was also recovered. Other general finds included a fragment of plaster and some small animal bones. A modern metal bolt is likely to represent an intrusive find pressed into the deposit following more recent work in the area.
- 5.2.5 A shell pathway (deposit 002) is likely associated with these 19th century gardens, although laid over deposit (012). One fragment of flower pot, of general 19th or 20th century date, was recovered from the pathway material.
- 5.2.6 A curving bank was partially investigated within the evaluation area. Stratigraphically this proved to be a relatively late feature, with bank material (deposit 005) overlying part of the aforementioned pathway. Eight fragments of pottery were recovered from this deposit, of a general post-medieval to late post-medieval date. Given the stratigraphic relationship of this feature to underlying 19th century deposits, it would seem likely that these pottery fragments are residual, with the bank formed from disturbed earlier deposits. A fragment of window glass and an iron nail were also retrieved from this deposit.
- 5.2.7 No environmental samples were taken during the course of the evaluation.

6 Conclusions

- 6.1 One of the primary aims of the evaluation was establish the cause and extent of ground subsidence in the area. This was found to be caused by the rotting of a tree trunk and its associated roots that had been left *in situ* under the present ground surface. Further research by the Cadw property services manager determined that this tree was removed as part of restoration works in the area in the late 20th century. The main area of disturbed ground extended across an area approximately 2.5m by 2.5m and reached a depth of 0.9m below current ground levels (12.4mOD), with some root action extending to a depth of 1.18m below current ground levels (12.12mOD). Further roots were noted extending to the west and east beyond the excavated area, but these were of a size that was unlikely to cause further subsidence. All rotten organic material and unstable ground was removed to more intact, stable deposits.
- 6.2 During the evaluation no natural ground was encountered, and all deposits encountered appeared to have been deposited from the 18th century onwards. No evidence of the medieval castle ditch was revealed, nor any medieval finds, features or deposits. The evaluation reached a depth of 1.18m below current ground levels (12.12mOD). Given the depth of post-medieval deposits it is possible that they infill a depression left by the medieval defensive ditch belonging to the inner ward of the medieval castle.
- 6.3 The lower deposits encountered (016), (015), (013) and (014) may represent demolition deposits associated with the castle, potentially subsequent to the Civil War slighting of the castle in the mid-17th century. This is due to the inclusions of mortar and rubble found within these deposits, and also the indications that the deposits were tipped into the area from a

southerly direction, the direction of the collapsed north-eastern facing curtain wall of the inner ward of the castle.

- 6.4 Upper deposits (008), (017), and potentially (010) are considered to be the remains of infill/levelling activities, also largely with material tipped in from the southwest, and potentially further infilling any depression caused by the underlying medieval castle ditch. Artifactual evidence found within these deposits would suggest that these landscaping activities were commenced sometime around the start of the 18th century and continued through into the 19th century, thereby associated with attempts to improve and landscape the area into gardens.
- 6.5 Deposit (011) and (012) appear to represent garden soils, dating from the 18th and 19th century, with the latter being associated with the layout of formal gardens in the area during the 19th century. The shell pathway (002) is likely to be a later garden feature. The low curving bank (005) appears to be a late garden landscaping feature, appearing to consist of redeposited embanked earlier deposits.
- 6.6 The project archive will be prepared in accordance with: *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (ClfA, 2014), the requirements of the National Monuments Record (Wales) and the *The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales* (National Panel for Archaeological Archives in Wales 2017). The archive will be deposited with Carmarthen Museum.

7 Bibliography and References

Published / Unpublished

Avent, R 1992 'Laugharne Castle, St. Clears', in *A Guide to Ancient and Historic Wales: Dyfed*, pp152-55 HMSO.

Chartered Institute for Archaeologists 2014 *Standards and Guidance for a Field Evaluation*

Groom, P 2017 *Specification for a Programme of Archaeological Evaluation: Laugharne Castle*.

RCAHMW 1917 *An Inventory of the Ancient Monuments of Wales and Monmouthshire V: County of Carmarthen*. London

Cartographic

Ordnance Survey 1888 1st Edition 1:2,500 map Carmarthenshire

Ordnance Survey 1906 2nd Edition 1:2,500 map of Carmarthenshire

Ordnance Survey 1953 1:10,560 map of Carmarthenshire

Ordnance Survey 1972 1:2,500 plan

Internet Sources

British Geological Survey: Geology of Britain Viewer

<http://mapapps.bgs.ac.uk/geologyofbritain/>

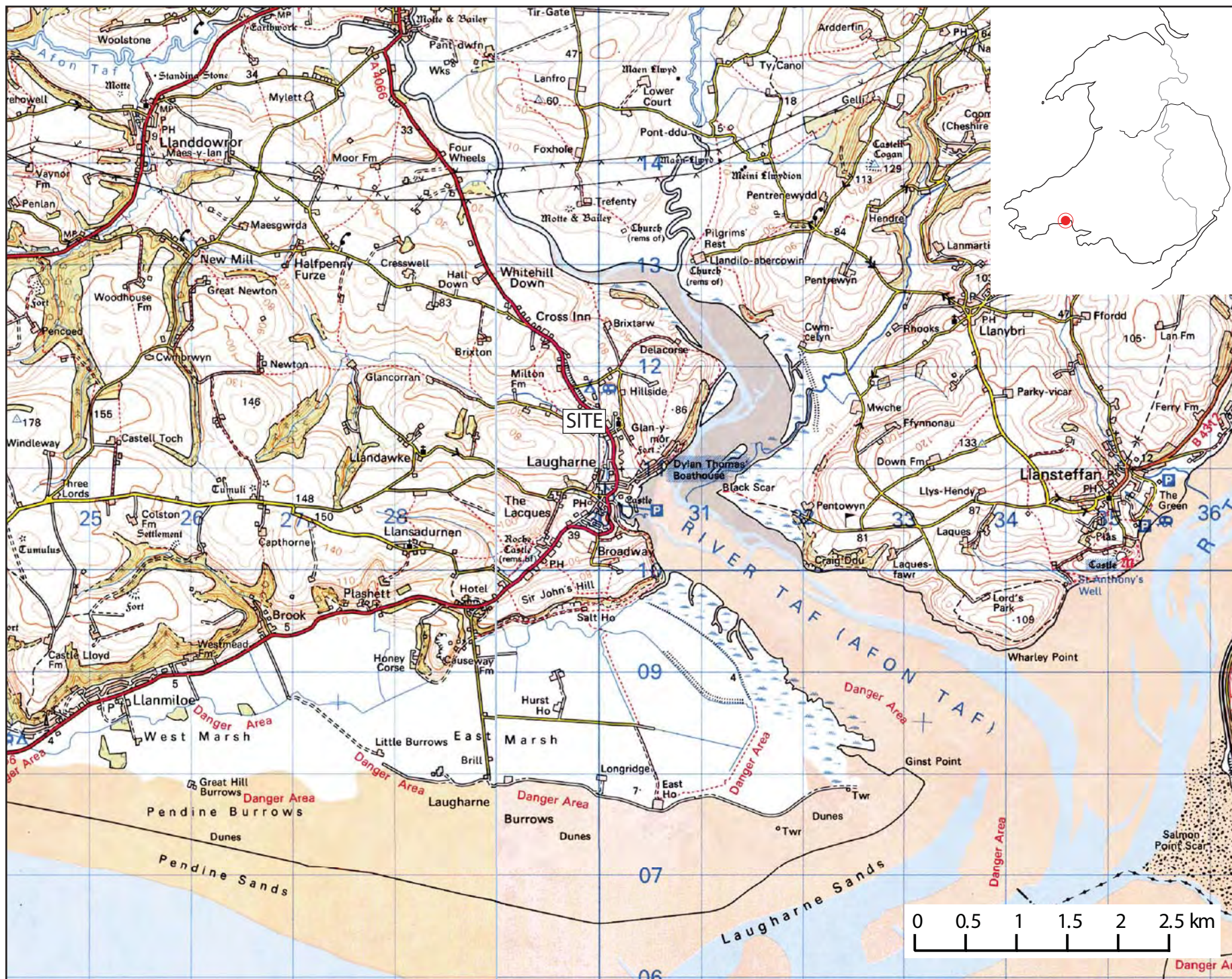


Figure 1: Location map,
1:50,000 @ A4

The Ordnance Survey has granted Archaeology Wales Ltd a Copyright Licence (No. 100055111) to reproduce map information; Copyright remains otherwise with the Ordnance Survey

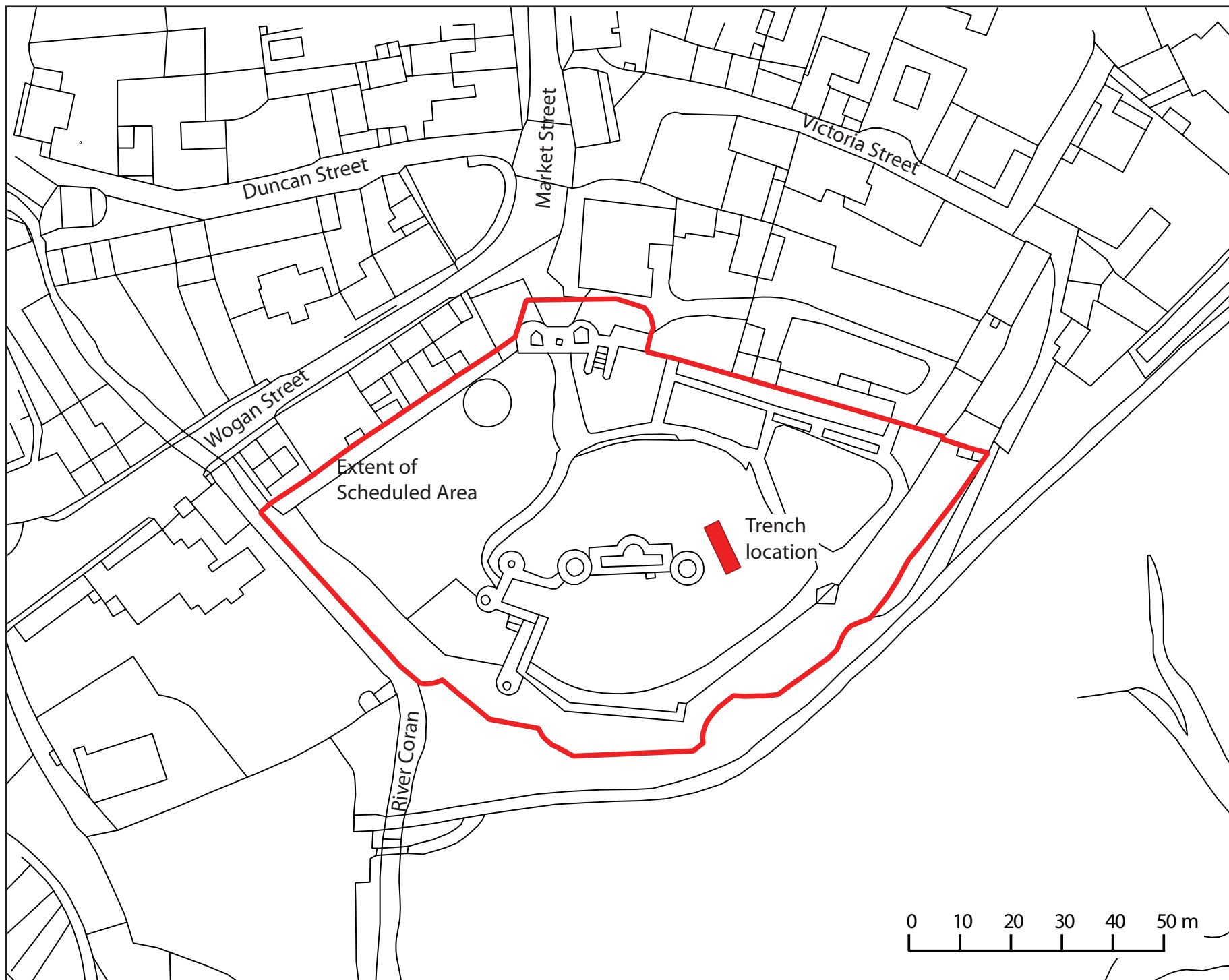


Figure 2: Site and trench location map, 1:1000 @ A4

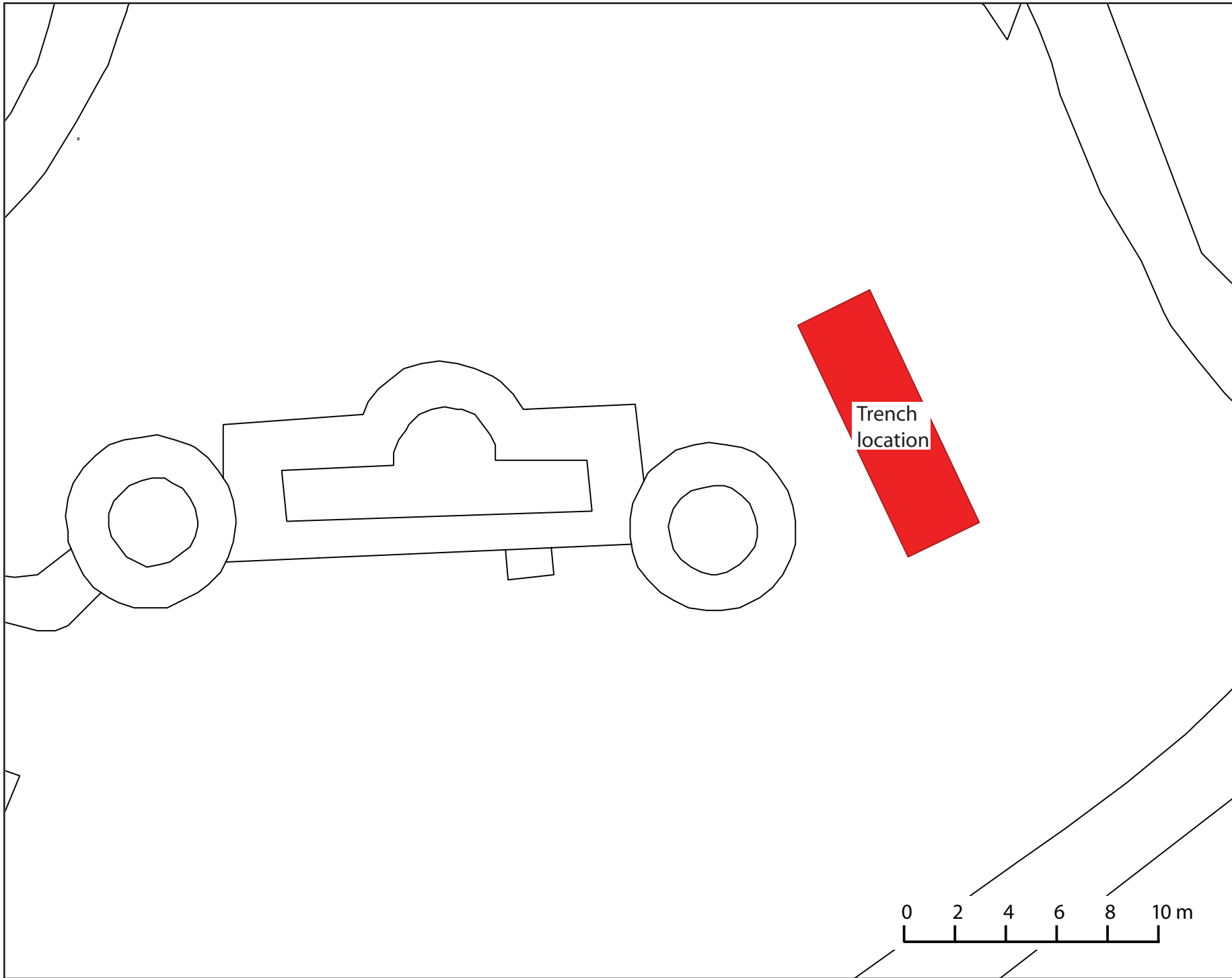
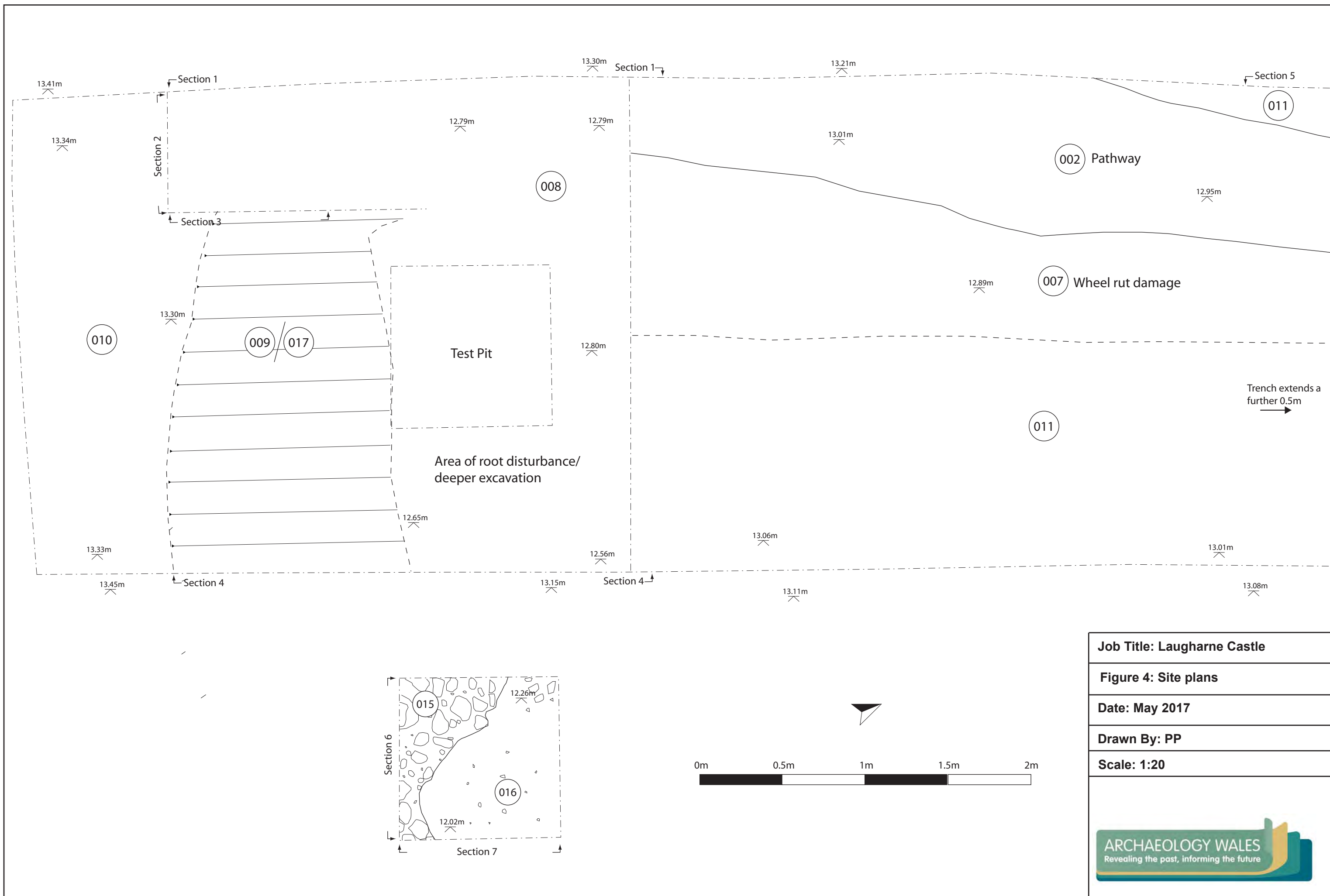


Figure 3: Trench location
plan
1:200 @ A4

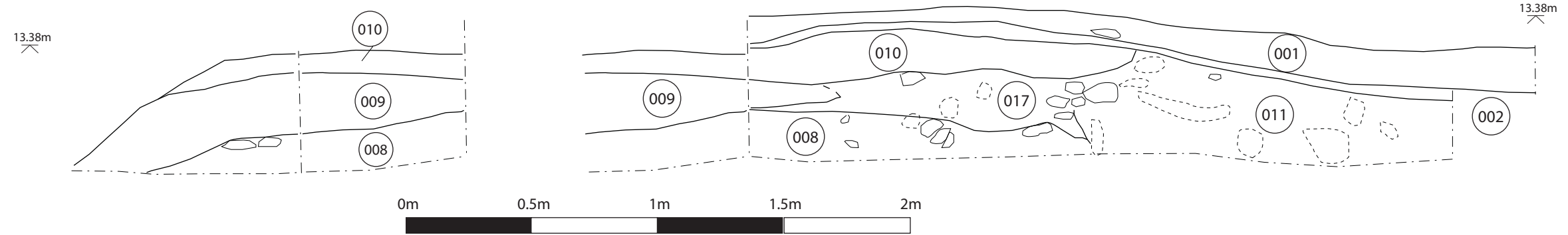


Section 3 West Facing

Section 2 North Facing

Section 2 North Facing

Section 1 East Facing

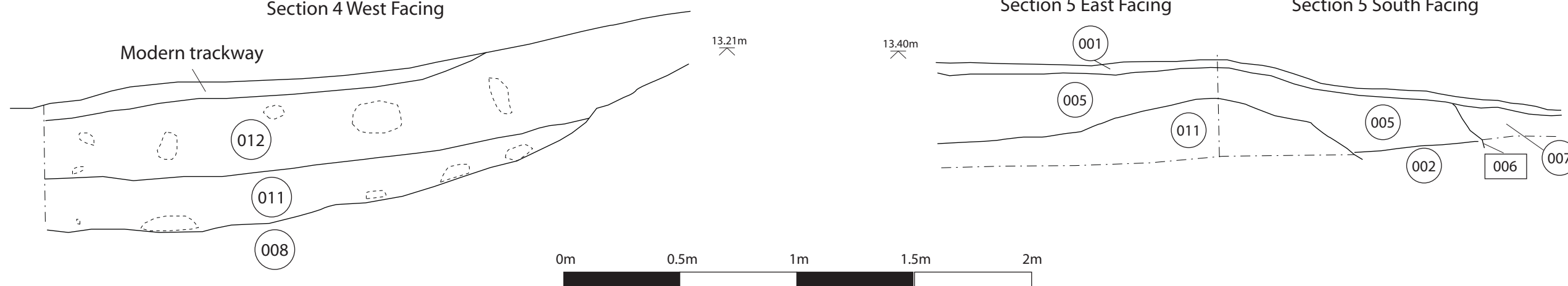


Scale 1:20

Section 4 West Facing

Section 5 East Facing

Section 5 South Facing

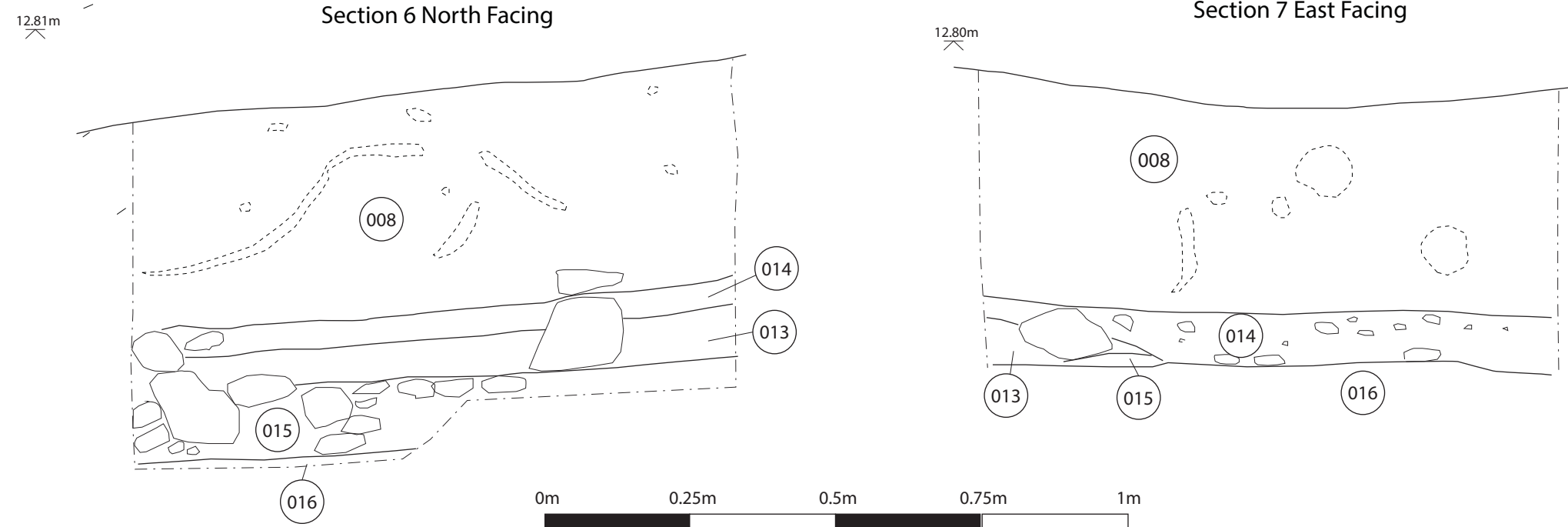


Scale 1:20

-  Stone
-  Root disturbance

Section 6 North Facing

Section 7 East Facing



Scale 1:10

Job Title: Laugharne Castle

Figure 5: Site sections

Date: May 2017

Drawn By: PP

Scale: 1:10 & 1:20



Photo 1: General shot, facing southeast, across the castle grounds to show location of excavated area (orange fencing).



Photo 2: Working shot of archaeological evaluation, facing south.



Photo 3: General location shot of archaeological evaluation, facing south-southeast.



Photo 4: General location shot of archaeological evaluation, facing north-northwest.



Photo 5: Shot taken during excavation, showing extent of tree root activity after the removal of the main stump. Facing south. 2m & 1m scales.



Photo 6: Shot taken during excavation, showing extent of tree root activity after the removal of the main stump. Facing east. 2m & 1m scales.



Photo 7: Shot taken during excavation, showing extent of tree root activity after the removal of the main stump. Facing west. 2m & 1m scales.



Photo 8: Section excavated through the deposits along the western side of the evaluation trench, excavated down to reveal deposits (008) and (011). Facing south. 2m & 0.5m scales.



Photo 9: West facing shot of the section along the western side of the evaluation trench. 2m scale.



Photo 10: South facing shot of the southern section of the excavated slot within the evaluation trench. 0.5m scale.



Photo 11: West facing shot of the test pit within the evaluation trench, showing deposits (015) and (016). 1m & 0.5m scales.



Photo 12: Working shot of evaluation trench, facing southeast, showing level reached at the base of the tree root disturbance.



Photo 13: South facing shot of the evaluation trench, showing the shell pathway (002) along the right. 2m & 1m scales.



Photo 14: North facing shot showing the shell pathway (002) along the left, partially covered by the low curving bank (005). 2m scale.

Archaeology Wales

APPENDIX I: Context List

Context Descriptions

Context Number	Context Type	Description	Dimensions (Length x width x thickness)
001	Layer	• Topsoil (turf covered) • Loose, mid brown silty-clay • No finds	Across trench, 0.18m thick
002	Layer	• Shell path • Moderate, dark brown silty-clay • Very abundant, small-medium shell fragments. • 19th/20th cent. flowerpot fragment	>5m x 0.7, 0.06m thick
003	Layer	• Mixed deposit (Interpretation panel area) • Loose, dark brown silty-clay • No finds	In area of interpretation panel, 0.08m thick
004	Layer	• Construction waste • Compact, mixed cement and stone rubble • Black plastic sheeting fragments	Dimensions not recorded
005	Deposit	• Bank material • Moderate, dark black-brown silty-clay • Common, small-medium shell fragments. • 3 x fragments 18th/19th century porcelain • 1 x fragment 17th/18th century pottery • 4 x fragment late post-medieval pottery • 1 x fragment 18th/19th century window glass • 1 x Fe nail	?m x >1.1m, 0.3m thick
006	Cut	• Wheel rut • Linear in plan, relatively straight sides, orientated north – south • Steep, straight sides. Not fully excavated • Single fill (007)	>4.8m x 0.6m, >0.15m deep
007	Fill	• Fill of 006 • Moderate, mid grey-brown silty-clay • Abundant, small sub-angular stone. Rare, medium brick fragments. Rare, small shell fragments. • No finds	>4.8m x 0.6m, >0.15m thick
008	Layer	• Tipped deposit • Moderate, light brown-grey sandy-silt • Abundant small to large lime-mortar fragments. Rare small slate fragments. Rare, small coal fragments. Rare, medium, oyster shell • 2 x fragments 18th century pottery • 1 x fragment late 16th-18th century pottery • 2 x fragment post-medieval pottery • 5 x fragments plaster	>3m x >1.6m, 0.40m thick

		• 1 x Georgian (?) coin • 1 x ?button loop • 1 x lead powder cup • 2 x 18th/19th century clay pipe stem • 1 x fragment animal bone	
009	Layer	• Tipped deposit • Moderate, light/mid yellow clay • Common, small-medium sub-angular stone • No finds	>1m x >0.9m, 0.3m thick
010	Layer	• Dumped deposit • Moderate, mid red silty-clay • Abundant, small sub-rounded and sub-angular stone • No finds	>1.5m x >1.16m, 0.2m thick
011	Layer	• Root-disturbed deposit/garden soil • Moderate, dark brown silty-clay • Common, small sub-angular stone • No finds	?m x >6.5m, 0.4m thick
012	Layer	• Garden soil • Moderate, dark black-brown silty-clay • 1 x fragment 18th/19th century handmade brick • 1 x fragment plaster • 1 x fragment 18th/19th century bottle glass • 1 x Victorian penny • 1 x Fe bolt • 1 x Fe object • 3 x 18th/19th century clay pipe stem • 4 x fragments animal bone • 1 x porcelain dolls leg	>2.7m x ?m, 0.3m thick
013	Layer	• Tipped deposit • Moderate, mid brown sandy-clay • No finds	>1m x >0.3m, 0.1m thick
014	Layer	• Trample/working deposit? • Fairly compact, dark brown-grey silt • Abundant, small mortar fragments. Common, small, sub-angular stone • 1 x Cu object & slag • 6 x fragments animal bone	>1m x >1mm, 0.1m deep
015	Layer	• Tipped deposit • Moderate, spread of small to medium sub-rounded to sub-angular stone • No finds	>1m x > 0.5m, 0.05m thick.
016	Layer	• Redeposited natural • Compact, mid orange-brown silty-clay • Abundant, small sub-angular stone. Rare, small coal fragments. Rare, small mortar flecks. • No finds	>1m x >0.86m, thickness not established
017	Layer	• Tipped deposit • Moderate, mid/light grey-brown silty-clay	?m x 1.3m, 0.3m thick

		• Common flecks of mortar. Common small fragments of coal. Common, small-medium shell fragments • No finds	
--	--	--	--

Archaeology Wales

APPENDIX II: Finds Catalogue

Archaeology Wales Ltd.

Finds catalogue Laugharne Castle, Carmarthen

Site code: 2510 - LCC/17/WB

Number	Context	Description	Amount	Weight
Pottery				
	002	Flowerpot	1	17
	005	Porcelain - 18th/19th C.	3	16
		Salt glazed pale farbric 17th/18th C	1	< 1
		Lead glazed red earthenware	1	2
		Unglazed red earthenware	2	32
		North Devon gravel tempered ware	1	10
	008	Bristol/Staffordshire	1	< 1
		Ewwenny Fabric - 18th C.	2	22
		North Devon gravel tempered ware	1	7
		Salt glazed pale farbric (Delft?) Late 16th/18th C	1	4
CBM				
	008	Plaster	5	28
	012	Handmade brick	1	168
	012	Plaster	1	9
Glass				
	005	Glass - window	1	6
	012	Glass - vessel	1	10
Metal				
	005	Iron nail	1	7
	008	Coin - possibly Georgian	1	8
		Gold'? Plated small loop (back of button?)	1	< 1
		Lead powder cup	1	15
	012	Penny coin	1	4
	012	Bolt - modern (discarded)	1	44
	012	Iron object	1	60
	014	Slag with Cu object within	1	26
Tobacco				
Clay Pipe				
	008	Stem	2	6
	012	Stem	3	5
Animal bone				
	008		1	23
	012		4	20
	014		6	59
Miscellaneous				
	008	Shell (snail)	1	4

012	Natural flints	7	102
012	Small porcelain doll's leg	1	6
014	Slate	4	317
014	Oyster shell	2	9

Total finds:

Pottery	14
CBM	12
Glass	2
Metal	8
Tobacco Clay Pipe	5
Animal Bone	2
Miscellaneous	15
Total:	58

Archaeology Wales

APPENDIX III: Written Scheme of Investigation

Archaeology Wales

WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL EVALUATION

AT

Laugharne Castle, Laugharne, Carmarthenshire

**Listed Building No.9653
Scheduled Ancient Monument CM003**

Prepared for:

Cadw

7th February 2017

Archaeology Wales Limited
The Reading Room, Town Hall
Great Oak Street, Llanidloes, Powys SY18 6BN
Tel: +44 (0) 1686 440371
Email: phil@arch-wales.co.uk



NON TECHNICAL SUMMARY

This Written Scheme of Investigation (WSI) details the proposal for programme of intrusive archaeological trial trench evaluation designed to investigate an area of ground collapse and unstable ground at Laugharne Castle, Carmarthenshire. It has been prepared by Archaeology Wales Limited for Cadw.

1. Introduction and archaeological background

Laugharne Castle, on the south coast of Carmarthenshire (SN 3021 1073 – Figure 1 & 2), is a Scheduled Ancient Monument (CM003) and a Grade I Listed Building (No.9653). Recent ground collapse and weakness has occurred within the castle grounds, thought to be the result of rotting tree stumps below ground. This has resulted in an area that is unsafe for public access, therefore Cadw have requested that an archaeological evaluation be undertaken in the area of collapse to investigate the nature of the collapse and the underlying archaeological resource, to enable appropriate mitigation measures to be employed to make the area safe for public access and protect any underlying archaeological deposits.

This Written Scheme of Investigation (WSI) has been prepared by Philip Poucher, Project Manager, Archaeology Wales Ltd (henceforth - AW) at the request of Cadw. It provides information on the methodology that will be employed by AW during an archaeological evaluation at the site.

The methodology set out in this WSI will be agreed with Cadw prior to the commencement of any intrusive archaeological investigations on the site. The recommendations made by Cadw are set out in the 'Specification for a Programme of Archaeological Evaluation', prepared by Polly Groom, Regional Inspector of Ancient Monuments at Cadw. The purpose of the proposed archaeological evaluation is to provide Cadw with the information that they have requested within this Specification.

The project will be managed by Philip Poucher and the site work will be supervised by Andy Shobbrook. Company CVs are available on request. The Site Assistant will be Tom Jamieson. Phil, Andy and Tom are experienced archaeologists with a detailed knowledge of the archaeology of south-west Wales. We anticipate that two people will complete the work in approximately 3-5 days, including backfilling.

All work will conform to the CIfA's Standards and Guidance for Archaeological Field Evaluation (CIfA 2014), and be undertaken by suitably qualified staff to the highest professional standards.

2. Historic Background and Site description

Laugharne Castle lies on the banks of the River Coran, overlooking the Taf estuary. It stands on a low cliff in the centre of the village of Laugharne, on the south coast of Carmarthenshire.

The following historic description is taken from the Specification provided by Cadw, itself taken from R. Avent, 1992, 'Laugharne Castle, St. Clears', in 'A Guide to Ancient and Historic Wales: Dyfed', HMSO, pp152-155.

Laugharne Castle may represent the site of the castle of Robert Courtemain at 'Abercorram', mentioned in 1116. However, the first definite reference to the castle is in 1189 when it was seized by the Lord Rhys, Prince of Deheubarth. The castle was further attacked and destroyed by Llewellyn the Great in 1215 and again taken and burnt in 1257.

The original early 12th century castle was probably a ringwork, traces of an important building with a large hearth have been found during excavations at the site. The castle was remodelled in the 2nd half of the 12th century, partially infilling the interior of the ringwork, with new defences and a large rectangular hall built. When attacked in 1257 the castle was in the hands of the de Brian family, and Guy de Brian (IV) subsequently began improving the castle, starting work on the strong masonry castle visible today. The de Brians remained the lords of Laugharne until the late 14th century, carrying out considerable additions and repairs to the castle during their occupancy. Following the death of Guy de Brian (VII) in 1390 the castle went into decline, with only parts of the castle occupied in the late 15th and early 16th century. In 1575 Elizabeth I granted the castle to Sir John Perrot, who converted the old medieval castle into a comfortable Tudor Mansion, similar to what he did at his main residence in Carew. Perrot died in 1592, and an inventory of that year suggests the repairs he made to the castle were of poor quality, and that the castle was likely to soon fall into ruin once more.

Little of the early castle is clearly visible, as the main hall was demolished and the defensive bank reduced, probably in the late 12th century. More of the late-13th century masonry rebuilding of the castle is visible, and can be seen in the two northern round towers and remains of the curtain wall. The impressive north-western tower, which acted as a keep and defended the entrance through the curtain wall, retains a medieval domed roof, although upper sections of the wall and battlements are more recent reconstructions. The remaining tower is a partly fallen three-storey structure, which had two-storeys and a circular stair added during the Tudor period. A new hall was also built along the south curtain wall in the late-13th century, and the outer ward to the north may also have been added at this time, probably with timber defences. Further strengthening at the end of the 13th century included a projecting gatehouse built over the earlier ditch, and a new round tower in the southwest corner of the inner ward. The defences of the outer ward were also rebuilt in stone. These masonry works were undertaken using red sandstone.

In the mid-14th century further works were undertaken in a distinctive green stone. The southwest corner of the inner ward, including the round tower, were heightened. The southeast corner was also remodelled, with a postern door inserted. The outer gatehouse was also rebuilt.

The Tudor alterations by Sir John Perrot completely remodelled the old hall against the south curtain wall, and heightened the curtain wall with mock battlements. This Tudor hall has since been removed. Ranges of buildings were added to the south and east of the inner ward, and a large accommodation block replaced the curtain wall between the two medieval round towers. The inner gatehouse was also heightened. A central cobbled courtyard with fountain was laid out in the inner ward, with gardens laid out in the outer ward.

Following slighting in the Civil War the castle was left as a romantic ruin during the 18th century. At the turn of the 19th century the outer ward was laid with formal gardens.

The area of proposed investigation lies within the outer ward, to the east of the main castle and adjacent to the easternmost tower. This location is believed to lie on the line of the medieval castle ditch. The area is currently part of the publically accessible gardens, laid in a mixture of formal and informal planting, lawns and shell paths. The area has sunk and holes appeared during routine maintenance works in the area. Initial inspections suggests wood is rotting away underneath the turf covering, believed to be tree stumps, although a larger area of ground surrounding these holes has become unstable. It is possible that these tree stumps may be part of the formal gardens laid out within the outer ward in the 19th century, or potentially during the Tudor period. Extensive excavations have been undertaken at the castle during the 1980s, this area however lies outside the previously excavated areas.

3 Site specific objectives

The Specification provided by Cadw lays out the main aims of the proposed work, these are to:

- make the area safe, removing the rotting tree-stumps
- archaeologically evaluate the area they lie within, to retrieve any information relating to the layout and nature of the formal gardens
- during the archaeological evaluation, to establish (if possible) the line of the castle ditch and record any other visible archaeological features
- work with Cadw's property services manager to ascertain the most appropriate way of backfilling and stabilising the area, ensuring that surviving archaeology is preserved *in situ*
- ensure the long-term survival of the information contained in such remains through archaeological recording; and
- prepare an interim report and the subsequent deposition of a project archive.

4 Evaluation Methodology

General

Cadw have identified an area measuring approximately 10m by 3m requiring an archaeological evaluation.

The aim of the work will be to establish and make available information about the archaeological resource existing on the site. The work will include the following elements:

- A programme of strategic trial trenching (Stage 1)
- The production of an illustrated report and the deposition of the site archive (Stage 2)

5 Method statement for Strategic Trial Trenching (Stage 1)

Preliminary work

The archaeological project manager in charge of the work will satisfy him/herself that all

constraints to ground works have been identified, including the siting of live services and Tree Preservation Orders.

The agreed evaluation area will be positioned to maximise the retrieval of archaeological information and to ensure that the archaeological resource is understood.

It is proposed that a single trench be excavated in the area indicated by Cadw (Figure 2 & 3), measuring 10m by 3m. This is a sloping area of ground where voids have been identified, the evaluation trench will cover the area of unstable ground.

The exact positioning of the trench will be agreed with Polly Groom of Cadw and may be adjusted on the ground in consultation with the property services manager prior to the commencement of works.

Evaluation

Turf and topsoil deposits will be removed by hand and stored in an appropriate area adjacent to the evaluation trench. This area will be agreed in consultation with the property services manager.

Loose organic material related to the rotting wood will be removed along with the topsoil. Care will be taken to ensure that only loose material will be removed, and such removal does not potentially disturb underlying archaeological material.

All areas will be subsequently hand cleaned using pointing trowels and/or hoes to reveal the extent of voids, organic areas and unstable ground. Deposits will be excavated stratigraphically, wherever possible, to prove the presence, or absence, of archaeological features and to determine their significance. The area will be excavated to a level where either the first significant archaeological structure or deposit is uncovered, or to stable ground which can be infilled and made safe, whichever occurs at the lesser depth.

Should excavation of some significant archaeological remains be required to facilitate ground stabilisation then further consultation will be held with Polly Groom and the Property Services Manager to determine an appropriate strategy.

The depth of the excavation will conform to current safety requirements. It is not anticipated that excavation will be required below 1.2m, however, if ground conditions require it the options of using shoring will be discussed with Cadw.

Recording will be carried out using Archaeology Wales recording systems (pro-forma context sheets etc), using a continuous number sequence for all contexts.

Written, drawn and photographic records (b&w, 35mm colour slides and digital) of an appropriate level of detail will be maintained throughout the course of the project. Digital photographs will be taken using a 10MP camera with photographs stored in Tiff format.

Plans and sections will be drawn to a scale of 1:50, 1:20 and 1:10 as required, and these will be related to Ordnance Survey datum and published boundaries where appropriate.

Upon completion of the excavation, the area will be covered with a geotextile

membrane prior to backfilling. An appropriate method of backfilling and ground reinstatement will be agreed with Cadw, this will be undertaken by Cadw staff.

Monitoring

The site works will be undertaken at the convenience of Cadw. Polly Groom, the regional Inspector of Ancient Monuments will be given regular updates prior to and during site work.

Any changes to the WSI that AW may wish to make after approval will be communicated to Cadw for approval.

Representatives of Cadw will be given access to the site so that they may monitor the progress of the field evaluation. No area will be back-filled, until Cadw has had the opportunity to inspect it, unless permission has been given in advance. Cadw will be kept regularly informed about developments, both during the site works and subsequently during post-excavation.

Recording

Recording will be carried out using AW recording systems (pro-forma context sheets etc), using a continuous number sequence for all contexts.

Plans and sections will be drawn to a scale of 1:20 and 1:10 as required and related to Ordnance Survey datum and published boundaries where appropriate.

All features identified will be tied in to the OS survey grid and fixed to local topographical boundaries. This can be achieved through measured triangulation from various points within the site boundary due to the proximity of extant buildings and other permanent features and their known locations. If required this could be further supplemented using a Topcon GTS725 total station.

Photographs will be taken in digital format, using a 10MP camera with photographs stored in Tiff format.

The archaeologists undertaking the evaluation will have access to the AW metal detector and be trained in its use.

Artefacts

Archaeological artefacts recovered during the course of the excavation will be cleaned and labelled using an accession number, which will be obtained from a suitable museum. A single number sequence will be allocated to all finds. The artefacts will be stored appropriately until they are deposited with a suitable local museum. If no suitable local repository exists then attempts will be made to deposit the artefacts at the National Museum, Cardiff. In the interim any recovered artefacts will be stored in secure premises at AW's offices.

A catalogue by context of all artefactual material found, quantified by number, weight, or both, and containing sketches of significant artefacts will be compiled.

All finds of gold and silver will be removed to a safe place and Natural Resources Wales, Cadw and the local coroner informed, within the guidelines of the Treasure Act 1996.

Any finds which are considered to be in need of immediate conservation will be referred to a UKIC qualified conservator (Phil Parkes at Cardiff University).

The requirements for the conservation of artefacts will be unpredictable until after the completion of the fieldwork. The archaeological contractor will ensure, however, that at least minimum acceptable standards are achieved (the UK Institute of Conservation's Guidelines for the Treatment of Finds from Archaeological Site should be used as guidance).

Human remains

Human remains will be left *in situ*, covered and protected when discovered. No further investigation should normally be permitted and Cadw and the local Coroner must be informed immediately. After discussion, it may be appropriate to take bone samples for C14 dating. If removal is essential it can only take place under the appropriate Ministry of Justice and Environmental Health regulations.

Environmental and technological samples

Deposits with a significant potential for the preservation of palaeoenvironmental material will be sampled, by means of the most appropriate method (bulk, column etc). Where sampling will provide a significant contribution to the understanding of the site AW will draw up a site-specific sampling strategy alongside a specialist environmental archaeologist. All environmental sampling and recording and will follow Historic England publication 'Environmental Archaeology' 2011.

Specialists

In the event of certain finds/features etc. being discovered, AW will seek specialist opinion for assistance. Such specialists will be accessed either internally within AW itself or from an external source. A list of external specialists is given in the table below.

Artefact type	Specialist
Flint	Kate Pitt (Archaeology Wales)
Animal bone	Richard Madgwick (Cardiff University)
CBM, heat affected clay, Daub etc.	Rachael Hall (APS)
Clay pipe	Hilary Major (Freelance)
Glass	Rowena Hart (Archaeology Wales)
Cremated and non-cremated human bone	Malin Holst (University of York)/Richard Madgwick (Cardiff University)
Metalwork	Kevin Leahy (University of Leicester)/ Quita Mold (Freelance)
Metal work and metallurgical residues	Dr Tim Young (GeoArch)

Neo/BA pottery	Dr Alex Gibson (Bradford University)
IA/Roman pottery	Jane Timby (Freelance)
Roman Pottery	Rowena Hart (Archaeology Wales)/ Peter Webster (Freelance)
Post Roman pottery	Stephen Clarke (Monmouthshire Archaeology)
Charcoal (wood ID)	John Carrot (Freelance)
Waterlogged wood	Nigel Nayling (University of Wales – Lampeter)
Molluscs and pollen	Dr James Rackham
Charred and waterlogged plant remains	Wendy Carruthers (Freelance)

Specialist finds and palaeoenvironmental reports will be written by AW specialists, or sub-contracted to external specialists when required.

Conservation

All archaeologically recovered artefacts, building materials, industrial residues, environmental material, biological remains (including human remains) and decay products (collectively referred to as 'finds') will be conserved following the guidelines set out in 'Standard and Guidance for the collection, documentation, conservation and research of archaeological materials' (CIfA, 2014).

6 Method statement for the production of an illustrated report and the deposition of the site archive (Stage 2)

Report preparation

The report will contain the following:

- A fully representative description of the information gained from the fieldwork of the archaeological evaluation, even if there should be negative evidence.
- A concise non-technical summary of the project results. This can be presented in Welsh to meet any Welsh language policy requirements.
- At least one plan showing the site's location in respect to the local topography, as well as the position of all excavated areas.
- Suitably selected plans and sections of significant archaeological features. All plans and sections should be related to Ordnance Datum.
- Written descriptions of all features and deposits excavated and their considered interpretation.
- A summary report on the artefactual and ecofactual assemblage and an assessment of its potential for further study, prepared by suitably qualified individuals or specialists.
- A statement of the local and regional context of the archaeological remains identified.

An interim report will be produced within three weeks of the completion of the fieldwork and sent to Cadw. A final report will be produced within two months of the completion of the fieldwork.

Copies of the report will be sent to Cadw, and DAT for inclusion in the HER. Digital

copies will be provided in pdf format.

A summary report of the work will be submitted for publication to a national journal (e.g. Archaeology in Wales) no later than one year after the completion of the work.

The site archive

A project archive will be prepared in accordance with the National Monuments Record (Wales) agreed structure and will also conform to the CIfA's Standards & Guidance for the creation, compilation, transfer and deposition of archaeological archives (2014) and guidelines set out in 'Management of Archaeological Projects Two, Appendix 3' (English Heritage 1991).

The final archive (site and research) will, whenever appropriate, be deposited with a suitable receiving institution, usually the relevant Local Authority museums service. Arrangements will be made with the receiving institution before work starts.

Although there may be a period during which client confidentiality will need to be maintained, copies of all reports and the final archive will be deposited no later than six months after completion of the work.

Copies of all reports, the digital archive and an archive index will be deposited with the *National Monuments Record*, RCAHMW, Aberystwyth.

Wherever the archive is deposited, this information will be relayed to the HER. A summary of the contents of the archive will be supplied to Cadw and DAT.

The finds, including artefacts and ecofacts, excepting those which may be subject to the Treasure Act, will be deposited with the same institution, subject to the agreement of the legal land owners.

7 Resources and timetable

Standards

AW works to the standards and guidance provided by the *Chartered Institute for Archaeologists*. AW fully recognise and endorse the Chartered Institute for Archaeologists' *Code of Conduct*, *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* and the *Standard and Guidance for archaeological field evaluation (2014)* currently in force. All employees of AW, whether corporate members of the Chartered Institute for Archaeologists or not, are expected to adhere to these Codes and Standards during their employment.

Particular note will be made of:

- Chartered Institute for Archaeologists (2014) Standard and Guidance Archaeological advice by historic environment services <http://www.archaeologists.net/codes/ifa>
- Chartered Institute for Archaeologists (2014) Standard and Guidance Archaeological field evaluation <http://www.archaeologists.net/codes/ifa>

- Chartered Institute for Archaeologists (2014) Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment <http://www.archaeologists.net/codes/ifa>
- Chartered Institute for Archaeologists (2014) Standard and Guidance for the collection, documentation, conservation and research of archaeological materials. <http://www.archaeologists.net/codes/ifa>
- Chartered Institute for Archaeologists (2014) Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives. <http://www.archaeologists.net/codes/ifa>
- Chartered Institute for Archaeologists (2014) Standard and guidance for commissioning work on, or providing consultancy advice on, archaeology and the historic environment <http://www.archaeologists.net/codes/ifa>

Project Tracking

The designated AW manager will monitor all projects in order to ensure that agreed targets are met without reduction in quality of service.

Staff

Site works will be supervised by Andy Shobbrook and the Site Assistant will be Tom Jamieson. Andy and Tom both live in Haverfordwest and will commute to the site. Overall management of the project will be undertaken by Philip Poucher. Company CVs are available on request.

Equipment

The project will use existing AW equipment.

Timetable of archaeological works

The evaluation will be undertaken at the convenience of the client.

Insurance

AW is fully insured for this type of work, and holds Insurance with Aviva Insurance Ltd and Hiscox Insurance Company Limited through Towergate Insurance. Full details of these and other relevant policies can be supplied on request.

Arbitration

Disputes or differences arising in relation to this work shall 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.

Health and safety

Prior to the commencement of work AW will carry out and produce a formal Health and Safety Risk Assessment in accordance with *The Management of Health and Safety Regulations* 1992. A copy of the risk assessment will be kept on site and be available for inspection on request. A copy will be sent to the client (or their agent as necessary) for their information. All members of AW staff will adhere to the content of this document.

AW will adhere to best practice with regard to Health and Safety in Archaeology as set out in the FAME (Federation of Archaeological Managers and Employers) health and safety manual *Health and Safety in Field Archaeology* (2002).

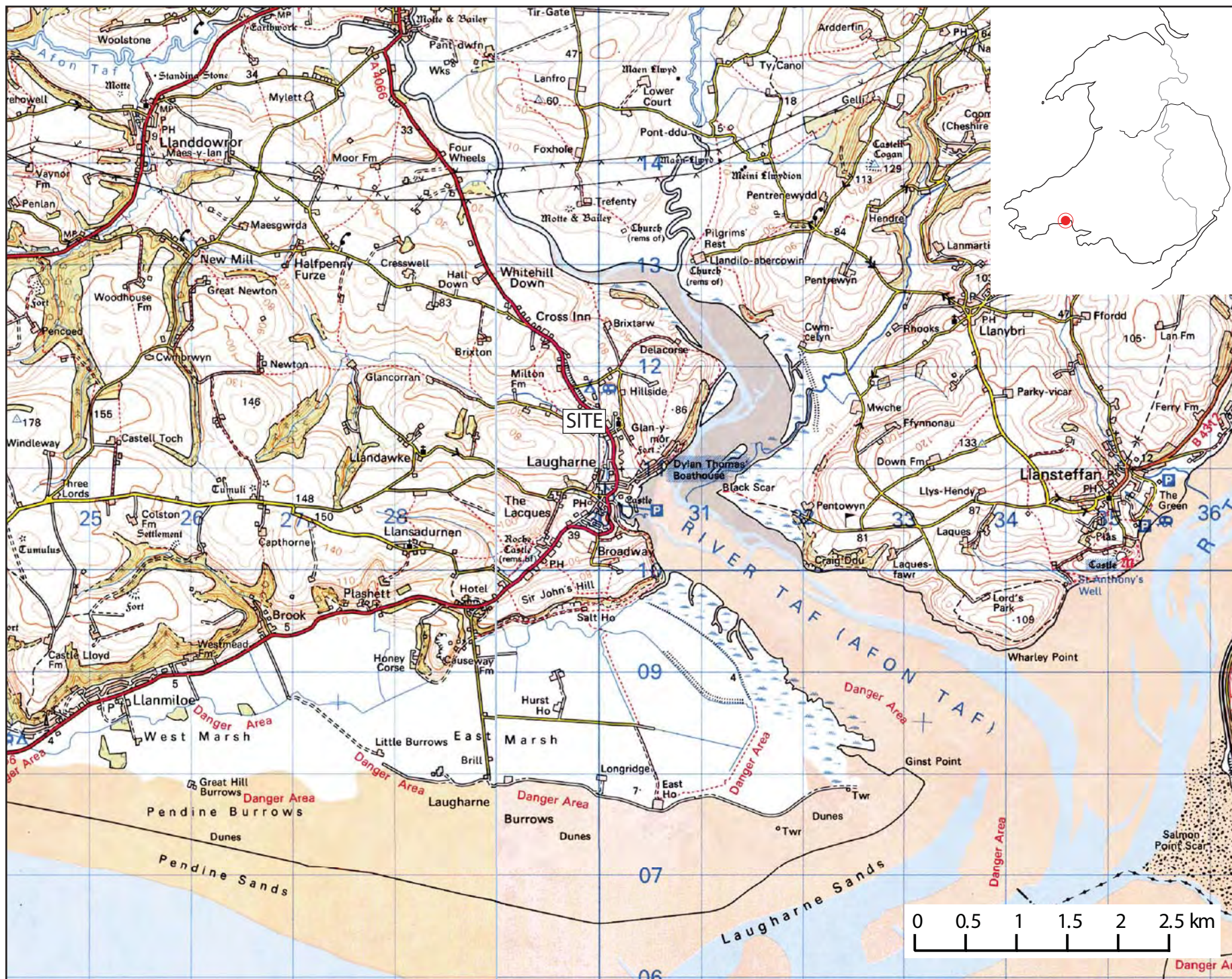


Figure 1: Location map,
1:50,000 @ A4

The Ordnance Survey has granted Archaeology Wales Ltd a Copyright Licence (No. 100055111) to reproduce map information; Copyright remains otherwise with the Ordnance Survey

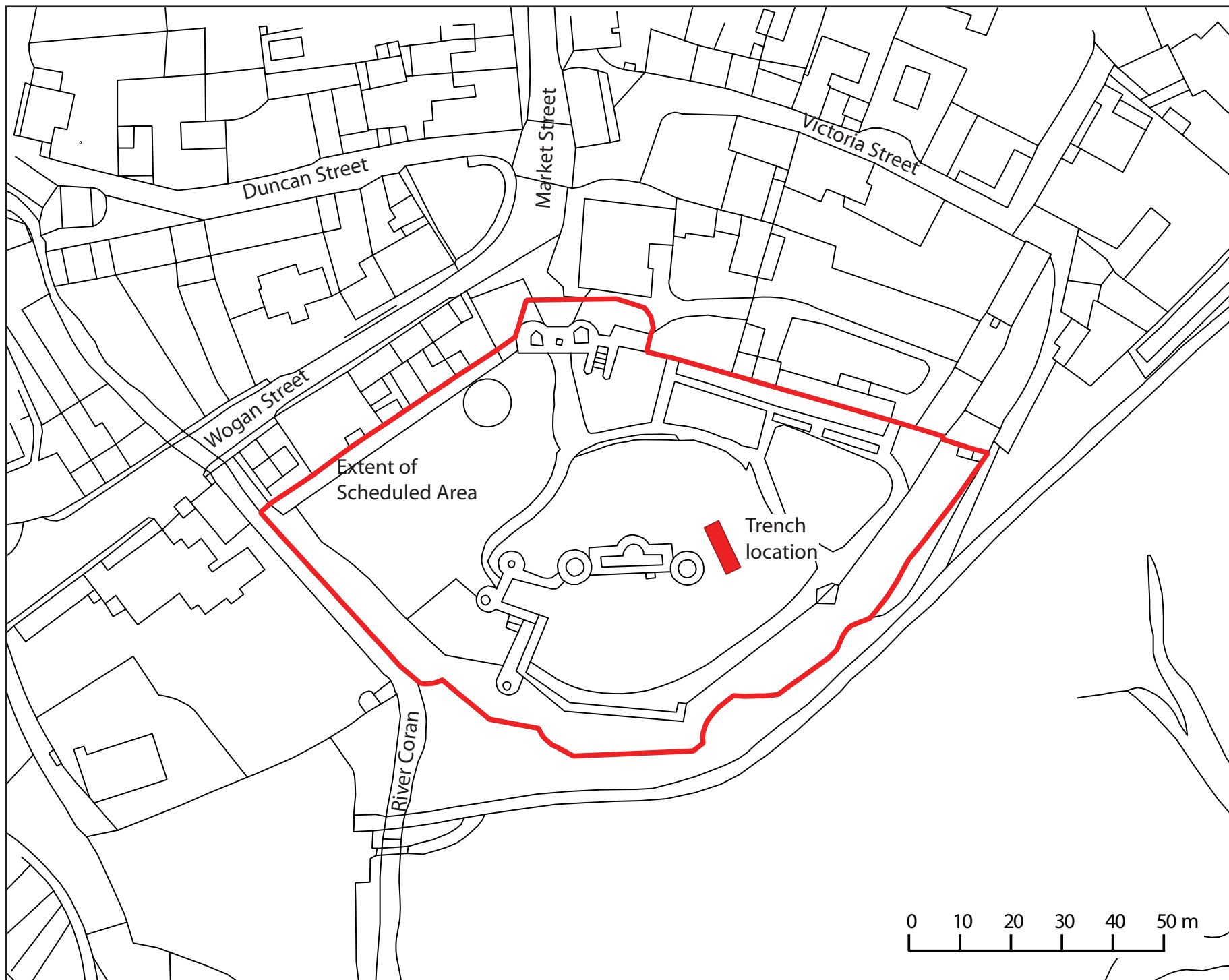


Figure 2: Site and trench location map, 1:1000 @ A4

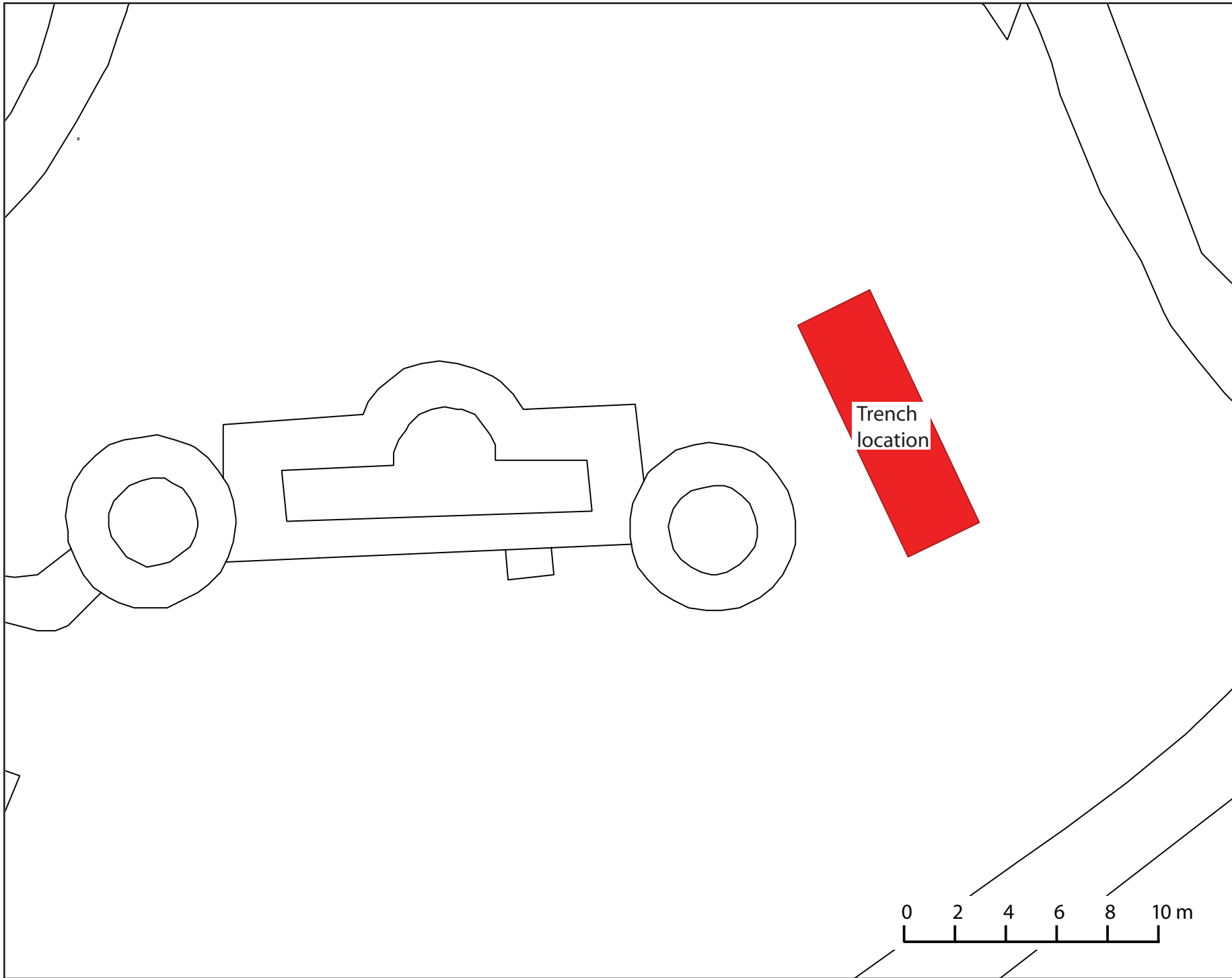


Figure 3: Trench location plan
1:200 @ A4

Archaeology Wales

APPENDIX IV: Archive Cover Sheet

ARCHIVE COVER SHEET

Laugharne Castle, Laugharne, Carmarthenshire

Site Name:	Laugharne Castle
Site Code:	LCC/17/WB
PRN:	25282
NPRN:	95634
SAM:	CM003
Other Ref No:	Listed Building No.9653
NGR:	SN 3021 1073
Site Type:	Castle grounds
Project Type:	Evaluation
Project Manager:	Phil Poucher
Project Dates:	March 2017
Categories Present:	Medieval -Modern
Location of Original Archive:	AW
Location of duplicate Archives:	Carmarthenshire County Museum, Abergwili
Number of Finds Boxes:	TBC
Location of Finds:	Carmarthenshire County Museum, Abergwili
Museum Reference:	TBC
Copyright:	AW
Restrictions to access:	None

Archaeology Wales

Archaeology Wales Limited

The Reading Room, Town Hall, Great Oak Street,
Llanidloes, Powys SY18 6BN

Tel: +44 (0) 1686 440371

Email: admin@arch-wales.co.uk

Company Directors: Mark Houlston MIFA & Jill Houlston

Company Registered No. 7440770 (England & Wales).

Registered office: Morgan Griffiths LLP, Cross Chambers,
9 High Street, Newtown, Powys, SY16 2NY