

**Written Scheme of Investigation  
for an Archaeological Evaluation at  
at The Tabernacle Chapel,  
Pembroke**

**Prepared for:  
Pembroke 21C Community Association**

Project No: 2319

Date: August 2015

## NON TECHNICAL SUMMARY

*This Written Scheme of Investigations details a proposal for the excavation of seven evaluation trenches in the rear burgage plot of Tabernacle Chapel, Pembroke, designed as a secondary investigation of potential buried archaeology within a proposed area of development. It has been prepared by Archaeology Wales Limited for Pembroke 21C Community Association.*

### **1. Introduction**

The proposed development plot occupies the rear burgage garden plot behind the Tabernacle Chapel in Pembroke, an area approximately 0.05ha, centred on SM 98695 01291 (Henceforth – the site). Information relating to the development has been supplied by Pembroke 21C Community Association. The proposed development **includes turning this rear burgage plot area into ‘The Journey Through Time’,** a garden designed to tell the story of Pembroke through planting and interpretation panels. A planning application has been submitted (planning application no. 15/0239/PA), the local planning authority is Pembrokeshire County Council.

Dyfed Archaeological Trust – Planning Services (Henceforth DAT-PS), in its capacity as archaeological planning advisor to Pembrokeshire County Council (Henceforth – PCC), have recommended an archaeological evaluation is undertaken at the site.

The purpose of the proposed work is to provide PCC with the information they are likely to request in respect of the proposed development, the requirements for which are set out in Planning Policy WALES, March 2002, Section 6.5, and Welsh Office Circular 60/96. The work is to highlight remains of potential archaeological interest to ensure that they are fully investigated and recorded if they are disturbed or revealed as a result of any subsequent activities associated with the development.

This Written Scheme of Investigations (WSI) has been prepared by Philip Poucher, Project Manager, Archaeology Wales Ltd (Henceforth - AW) at the request of Pembroke 21C Community Association. It provides information on the methodology which will be employed by AW during the proposed evaluation. DAT-PS have also recommended that an archaeological watching brief be maintained on any planned groundworks within the development area. This will be subject to a separate WSI that will be submitted to DAT-PS for approval on behalf of PCC.

All work will conform to the Standard and Guidance for Archaeological Evaluation (CIfA 2014) and be undertaken by suitably qualified staff and in accordance with the standards and guidelines of the IfA. The proposed work will be managed by Philip Poucher and supervised by Andrew Shobbrook.

### **2 Previous Results**

A Desk-based Assessment of the proposed development site was undertaken by AW (Report No. 1346) for Pembroke 21C Community Association in June 2015.

The Desk-based Assessment highlighted that plot occupies a medieval burgage plot within the town of Pembroke, formerly enclosed by a defensive wall remains of which may exist below ground, along with other potential medieval deposits and

structures. Post-medieval quarrying and lime-burning activity is also present at the site, with a limekiln lying in the southern boundary wall with its structure extending into the plot. A post-medieval building has also been identified within the plot, of which there are now no above-ground remains.

There is also the potential for prehistoric remains in this area, particularly the Palaeolithic and Mesolithic within a small cave that exists within the site area, as well as general potential relating to inferred Iron Age and early medieval activity in the area.

The groundworks associated with the proposed development are anticipated to be minimal but have the potential to expose, damage and destroy archaeological remains, the extent, condition and significance of which is not yet fully understood.

### **3 Site specific objectives**

This WSI is for a seven trench field evaluation to be undertaken within the application area in accordance with guidelines set out in Planning Policy Wales 2011 and Welsh Office Circular 60/96.

The objectives of the archaeological programme are to establish the presence or absence of archaeological deposits at the site, to assess the extent and significance of the archaeological resource of the site, to assess the potential impact of the development proposals on surviving remains, and to inform future decision making and potential mitigation strategies.

The work will include an assessment of the regional context within which the archaeological evidence rests and will aim to highlight any relevant research issues within national and regional research frameworks.

The work will result in a fully illustrated report that will provide information of sufficient detail to allow informed planning decisions to be made which can safeguard the archaeological resource. Preservation *in situ* will be advocated where at all possible, but where engineering or other factors result in loss of archaeological deposits, preservation by record will be recommended.

### **4 Method Statement for Evaluation**

The field evaluation will comprise the excavation and recording of seven hand-excavated evaluation trenches of approximately 1.2m by 1.2m (see the attached plan), with a trench above the limekiln (Trench 5) measuring approximately 1m by 2m.

#### 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, bat and badger licences and the requirement for work in the vicinity of Listed Buildings.

#### Evaluation

A total of seven evaluation trenches will be located across the assessment area. These trenches are located to assess features identified within the Desk-based assessment and / or areas of potential ground disturbance. The precise location of the trenches will be

agreed with DAT (with any on-site constraints taken into consideration) prior to the commencement of on-site works.

Trench 1 will be located on the upper northern terrace, located in an area away from overhanging structures in the northwest corner and the northern boundary wall. It is positioned to investigate an area identified as that of a former post-medieval building of which no above-ground remains exist. It is also in an area considered suitable for a potential medieval defensive town wall. Development plans for this area also involve the construction of a stairway from the level of the Chapel above which will require groundworks.

Trenches 2 - 4 will be located within the garden terrace plots that run down the eastern edge of the site. These will be positioned away from the boundary wall to avoid disturbing the wall, and also designed to investigate garden deposits and areas of potential best preservation, as well as attempting to ascertain original ground levels.

Trench 5 will be located across the top of the limekiln structure. This is positioned to identify the depth, condition and layout of the limekiln structure and investigate the deposits infilling the crucible of the kiln itself. The intention is to reveal the limekiln structure and clear out loose material within the crucible as part of the desire to tell the **story of Pembroke's heritage within the 'Journey Through Time', the limekiln is considered to be an significant part of the history of the site and an important feature of the 'Journey Through Time'. The Pembroke Town Walls Trust (PTWT) are also keen to** promote the enhancement and preservation of the town walls, of which the kiln forms a part. There will also be a requirement for a line of fencing to be established across the top of the southern face of the kiln and adjoining walls for safety reasons which may require groundworks in this area. Shoring will be put in place within the draw holes of the limekilns prior to any excavation work, as has been agreed in an on-site meeting with the Cadw regional building inspector, and the developers are committed to consolidating the structure as it is revealed. If the structure does become unstable during the course of the excavation then all work will cease and further advice from Cadw and DAT-PS will be sought.

Trench 6 will be located to the rear of the limekiln. This is positioned to investigate the extent of the limekiln structure and associated features, in a particular area where the establishment of footpaths may require landscaping works due to changing ground levels.

Trench 7 will be located to the east of the cave, positioned away from the overhanging stone face to the north and a badger sett to the southeast. This trench is positioned to investigate potential cave deposits. The cave itself will not be disturbed as part of the development plans, therefore it is not proposed to excavate within the cave itself, however, cave deposits may extend beyond the current limits of the cave which appears to have been altered through post-medieval quarrying activity.

All trenches will be hand-excavated to the top of the archaeological horizon by a team of professional archaeologists working alongside local community volunteers. All volunteers will work under close archaeological supervision. All areas will be hand cleaned using hoes and/or pointing trowels to prove the presence, or absence, of archaeological features and to determine their significance. In each area the excavation of the minimum number of archaeological features will be undertaken, to elucidate the character, distribution, extent and importance of the archaeological remains. This will include 50% of all linear features, 50% by half sectioning of all pit and posthole features under 1m in diameter and 50% of all larger pit features. Built structures will be cleaned but left *in situ*.

If archaeological horizons are not revealed then in each area sufficient excavation will be undertaken to ensure that the natural horizons are reached and proven. If safety reasons preclude manual excavation to natural, hand augering may be used to try to assess the total depth of stratification within each area. The depth of the excavation will conform to current safety requirements. If excavation is required below 1.2m the options of using shoring or stepped trenching will be discussed with DAT-PS.

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

Recording will be carried out using Archaeology Wales recording systems (pro-forma context sheets etc), using a continuous number sequence for all contexts in accordance with the AW technical manual – Procedures for Excavation and Site Recording 2011.

Written, drawn and photographic records of an appropriate level of detail will be maintained throughout the course of the project. Photographs will be taken in digital \*RAW format, using a 14MP camera. These will be converted to Tiff format for archiving. Should significant remains be identified that require excavation, photographs will also be taken in black and white and colour slide (35mm film).

All features identified will be tied in to the OS survey grid and fixed to local **topographical boundaries and related to the developer's site plan**. The location of all features will also be recorded using a Topcon GTS725 total station.

#### Monitoring

DAT-PS will be contacted prior to the commencement of ground works, and subsequently once the work is underway.

DAT-PS will be provided with notice of the start date, a projected timetable and a copy of the Health and Safety Risk Assessment if required.

Any changes to the specification that the contractor may wish to make after approval will be communicated to DAT-PS for approval on behalf of the Planning Authority.

If it is felt necessary to expand on the excavation area – i.e. add further trenches or expand existing ones, this will be undertaken after discussion with DAT-PS and the client.

Representatives of DAT-PS will be given access to the site so that they may monitor the progress of the field evaluation. DAT-PS will be kept regularly informed about developments, both during the site works and subsequently during post-excavation.

#### Artefacts

Archaeological artefacts recovered during the course of the excavation will be cleaned and labelled using an accession number which will be obtained from the local museum. A single number sequence will be allocated to all finds. The artefacts will be stored appropriately until they are deposited with the museum.

All artefacts recovered during the project will be retained and related to the contexts from which they were derived. All typologically distinct and closely datable finds will be recorded three-dimensionally.

The evaluation will carefully consider any artefactual or economic information and provide an assessment of the viability, for further study, of such information. It will be particularly important to provide an indication of the relative significance of such material for any subsequent decision-making process regarding mitigation strategies.

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

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

Pottery will be analysed to the standards outlined in "Guidelines for the Preparation of Pottery Archives" as prepared by the Study Group for Roman Pottery in consultation with the IFA. All other material will be analysed following the advice given in the Institute of Field Archaeologists: Guidelines for Finds Work.

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).

All finds of gold and silver will be removed to a safe place and DAT-PS, the client and the local coroner informed, within the guidelines of the Treasure Act 1996.

#### Environmental and technological samples

Samples will be taken where necessary when significant deposits are located. Minimum sample size will be 10 litres (where possible). Where the minimum sample size is not achievable, then 100% of the deposit will be sampled.

Samples will be retained for processing. The level of post-excavation processing will be dependent on the results of the field evaluation and following discussion with an environmental specialist and DAT-PS.

Any features containing deposits of environmental or technological significance will be sampled. If required, the project manager should arrange, through a suitably qualified expert the assessment of the environmental potential of the site through examination of suitable deposits. The assessment of potential should consider the guidelines set out in the English Heritage publication 'Guidelines for Environmental Archaeology' March 2002.

The requirements for the conservation of samples 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 DAT-PS 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.

### Specialists

In the event of certain finds/features etc. being discovered, the site archaeologist may have to seek specialist opinion for assistance. Such specialists will be accessed either internally within AW itself or from an external source should any such analysis be deemed necessary. A list of specialists is given in the table below. Specialist reports will be added to the finished report as an addendum.

Type	Name	Tel No.
Flint	Amelia Pannett	02920 899509
Animal bone	Jen Kitch	07739 093712
CBM, heat affected clay, Daub etc.	Rachael Hall	01305 259751
Clay pipe	Hilary Major	01376 329316
Glass	Andy Richmond	01234 888800
Cremated and non-cremated human bone	Malin Holst	01759 368483
Metalwork	Kevin Leahy	01652 658261
Neo/BA pottery	Dr Alex Gibson	Bradford University
IA/Roman pottery	Jane Timby	01453 882851
Post Roman pottery	Mr Paul Blinkhorn	
Charcoal (wood ID)	John Carrot	01388 772167
Waterlogged wood	Nigel Nayling	University of Wales (Lampeter)
Molluscs and pollen	Dr James Rackham	01992 552256
Charred and waterlogged plant remains	Wendy Carruthers	01443 233466
Palaeoenvironmental sampling and analysis	Dr Martin Bates	University of Wales (Lampeter)

## 5 Method statement for the production of an illustrated report and the deposition of the site archive

### Report preparation

The report will contain the following:

- **A** fully representative description of the information gained from the evaluation, even if there should be negative evidence.
- **A concise non-technical** summary of the project results.
- **At** least one plan showing the sites location in respect to the local topography, as well as the position of all excavated areas.
- Plans indicating all 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.**

Copies of the report will be sent to the client, DAT-PS, and for inclusion in the HER. Digital copies will be provided in pdf format if required.

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 post-excavation work.

#### The site archive

A project archive will be prepared in accordance with the National Monuments Record (Wales) agreed structure and be deposited within an appropriate local museum on completion of site analysis and report production. It will also conform to the guidelines set out in MoRPHE (English Heritage, 2006).

Arrangements will be made with the local museum before work starts. Wherever the archive is deposited, this information will be relayed to the HER.

Although there may be a period during which client confidentiality will need to be maintained, the report and the archive will be deposited not later than six months after the completion of the work.

Other significant digital data generated by the survey (i.e. AP plots, EDM surveys, CAD drawings, GIS maps, etc.) will be presented as part of the report on a CD/DVD. The format of this presented data will be agreed with the curator in advance of its preparation.

## **6 Resources and timetable**

#### Standards

All stages of the project will be undertaken by AW staff using current best practice. All work will be undertaken to the standards and guidelines of the IfA.

All work will be undertaken in accordance with the AW technical manual – Procedures for Excavation and Site Recording 2011.

#### Staff

The project will be undertaken by suitably qualified AW staff. Overall management of the project will be undertaken by Philip Poucher.

The site will be supervised by Andrew Shobbrook.

#### Equipment

The project will use existing Archaeology Wales equipment.

#### Timetable of archaeological works

No start date has yet been set.

The site report will follow within three months of completion of the fieldwork.

#### Insurance

Archaeology Wales is an affiliated member of the CBA, and holds Insurance through the CBA insurance service.

#### Arbitration



In the event of any dispute arising out of this Agreement (including those considered as such by only one of the parties) either party may forthwith give to the other notice in writing of such a dispute or difference and the same shall be and is hereby referred for decision in accordance with the Rules of the Chartered Institute of **Arbitrators' Arbitration scheme for the Institute for Archaeologists** applying at the date of this Agreement.

Health and safety

All members of staff will adhere to the requirements of the Health & Safety at Work Act, 1974, and the Health and Safety Policy Statement of Archaeology Wales.

AW will produce a detailed Risk Assessment before any work is undertaken.





Figure 1: Location map showing site & study area. Based on Ordnance Survey 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.



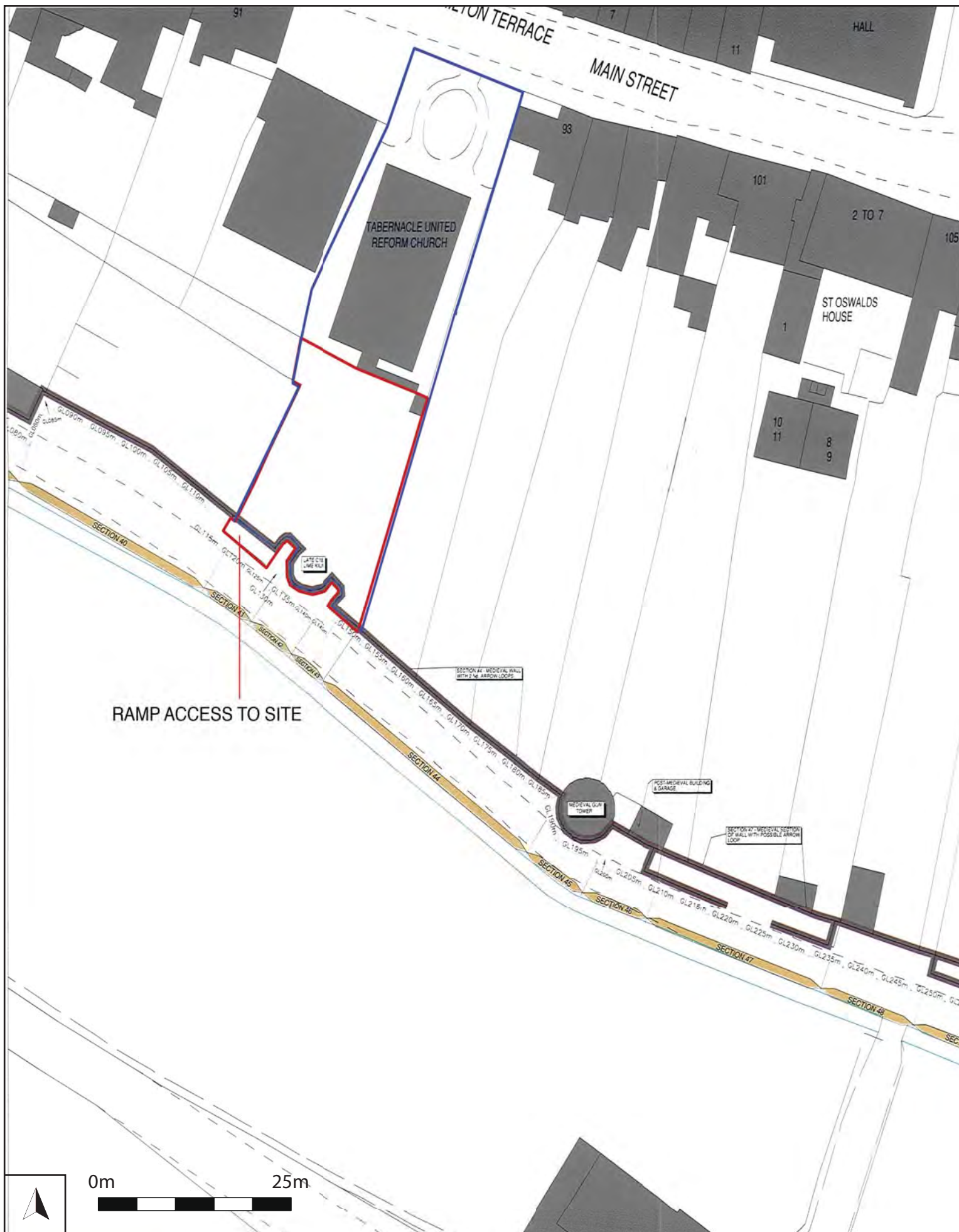


Figure 2: Site location plan. Tabernacle Church property boundary in blue, site location in red.

Plan provided by Ancanthus Holden, via Pembroke 21C.



**EXISTING DRAINAGE:**  
FORM TIMBER CLADDING TO HIDE VERTICAL DRAINAGE

**BAT:**  
SINGULAR LESSER HORSESHOE BAT. IVY CURTAIN TO REMAIN.

**BADGER:**  
OUTLYING SETT IN USE

**STEPS:**  
3 NO

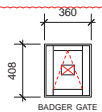
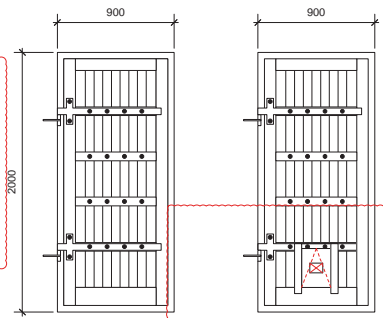
**GATES:**  
3NO WITHOUT BADGER FACILITY

**GATES:**  
1NO WITH BADGER FACILITY

**FRUIT TREES:**  
4NO RE-PLANTED

EXISTING ASH REMOVED

LIME KILN SOIL TO BE REMOVED FROM CRUCIBLE



NEW STAIRCASE ALLOWING CONNECTION TO TABERNACLE AND MAIN STREET

STAND PIPES

EXISTING TREE REMOVED

SEAT FOR QUIET CONTEMPLATION AREA AND POND

WILLOW WATTLE SCREEN TO PREVENT PUBLIC ACCESS TO CAVE AND BADGER SET

NEW POST AND RAIL FENCE

DEDICATED BADGER GATE THROUGH WALL

HATCH INDICATES COMPACTED GRAVEL PATHWAYS

PLANTING BEDS

Rev	Description	Date	Initial
E	UPDATED TO SKETCH. NOTES AMENDED.	13/7/15	
D	LOGO ADDED. TREES MOVED	20/5/15	
C	TREES UPDATED	8/5/15	
B	TREES INDICATED	1/5/15	
A	NOTES ADDED. INTERNAL ARRANGEMENTS ALTERED.	13/4/15	

Energy Consultant:

Structural Engineer:

M & E Consultant:

Quantity Surveyor:

WATERMAN'S LANE  
THE GREEN  
PEMBROKE  
PEMBROKESHIRE  
WALES  
SA71 4NU  
TEL (01546) 685472  
FAX (01546) 621200  
architects@acanthusholden.co.uk  
www.acanthusholden.co.uk



Client: PTWT

Project: TABERNACLE WALLED GARDEN

Drawing Title: PLAN

Scale: 1:100	Sheet Size: A1	Issue Status:
Job No: P2009C	Drawing No: P 100	Rev: E
Original: MAR 2015	Date:	Checked:

NOTE: THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELATED DRAWINGS, SPECIFICATIONS AND/OR SPECIFICATIONS. ALL DISCREPANCIES TO BE CHECKED ON SITE. ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY.  
Copyright: Acanthus Holden Architects (Note: prints of drawing not to track scales)







Trench Location Plan