



John Harvey House, Hayle Cornwall Archaeological Watching Brief



John Harvey House, Hayle, Cornwall

Archaeological Watching Brief

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Acknowledgements

This study was commissioned by Trevor Humphreys on behalf of Harvey's Foundry Trust and carried out by Cornwall Archaeological Unit, Cornwall Council.

The fieldwork was undertaken by Antony Angove and Jo Sturgess.

The Project Manager was Jo Sturgess.

The views and recommendations expressed in this report are those of Cornwall Archaeological Unit and are presented in good faith on the basis of professional judgement and on information currently available.

Freedom of Information Act

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Abbreviations

| | |
|------|--|
| CAU | Cornwall Archaeological Unit |
| CIfA | Chartered Institute for Archaeologists |
| HE | Historic England |
| HER | Cornwall and the Isles of Scilly Historic Environment Record |
| LPA | Local Planning Authority |
| MCO | Monument number in Cornwall HER |
| NGR | National Grid Reference |
| OD | Ordnance Datum – height above mean sea level at Newlyn |
| OS | Ordnance Survey |

1 Summary

Cornwall Archaeological Unit (CAU) undertook an archaeological watching brief during February 2022, which involved recording nine test pits following investigation for signs of subsidence at John Harvey House, 24 Foundry Square, Hayle.

Planning and Listed Building Consent were not required for the works. However, due to the significance of the site as part of a Grade II* Listed Building, an archaeological watching brief was undertaken during February 2022 to record the works.

The building was used in the 19th century as Harvey's Foundry offices and showroom, and incorporates surviving remains of the former 18th century foundry complex at the rear.

Two test pits at the rear of the building revealed surviving floors of the former 18th foundry buildings including a lime floor in test pit 1 and a granite flagstone floor in test pit 2. They survived at a depth of approximately 0.6m below the present ground surface.

John Harvey House, Hayle, Cornwall, Archaeological Watching Brief

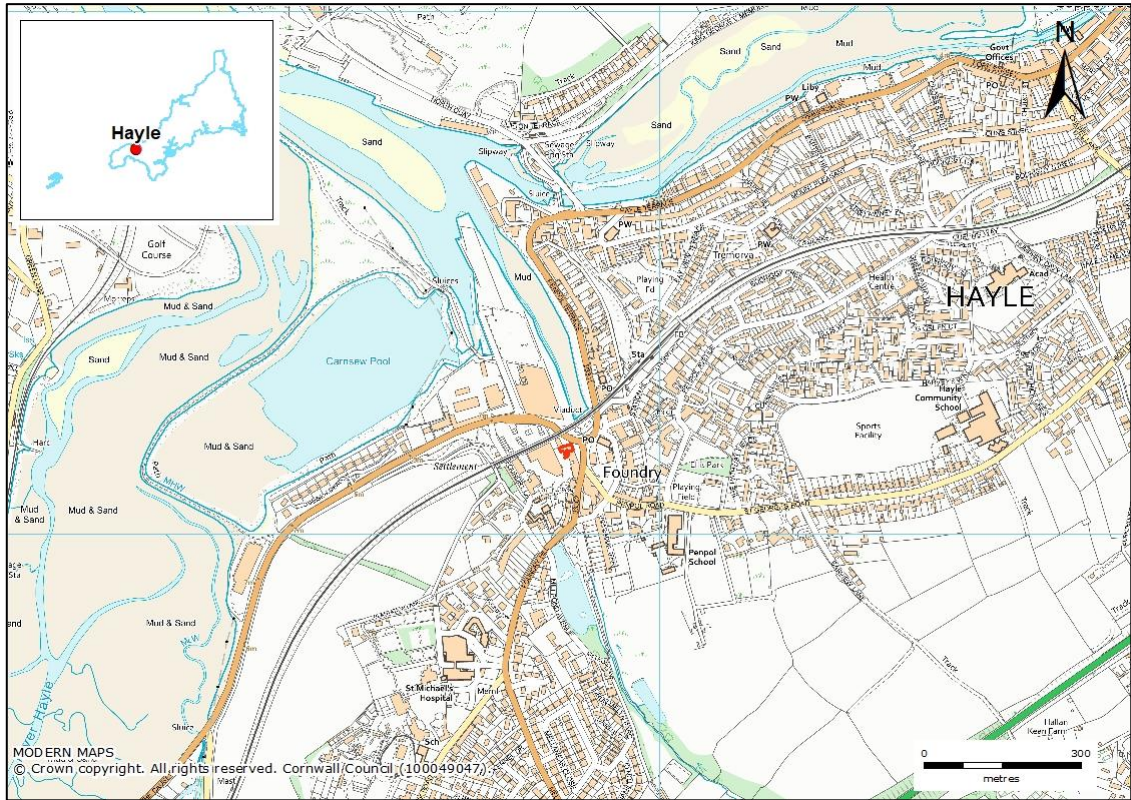


Fig 1 Location map (site outlined in red).

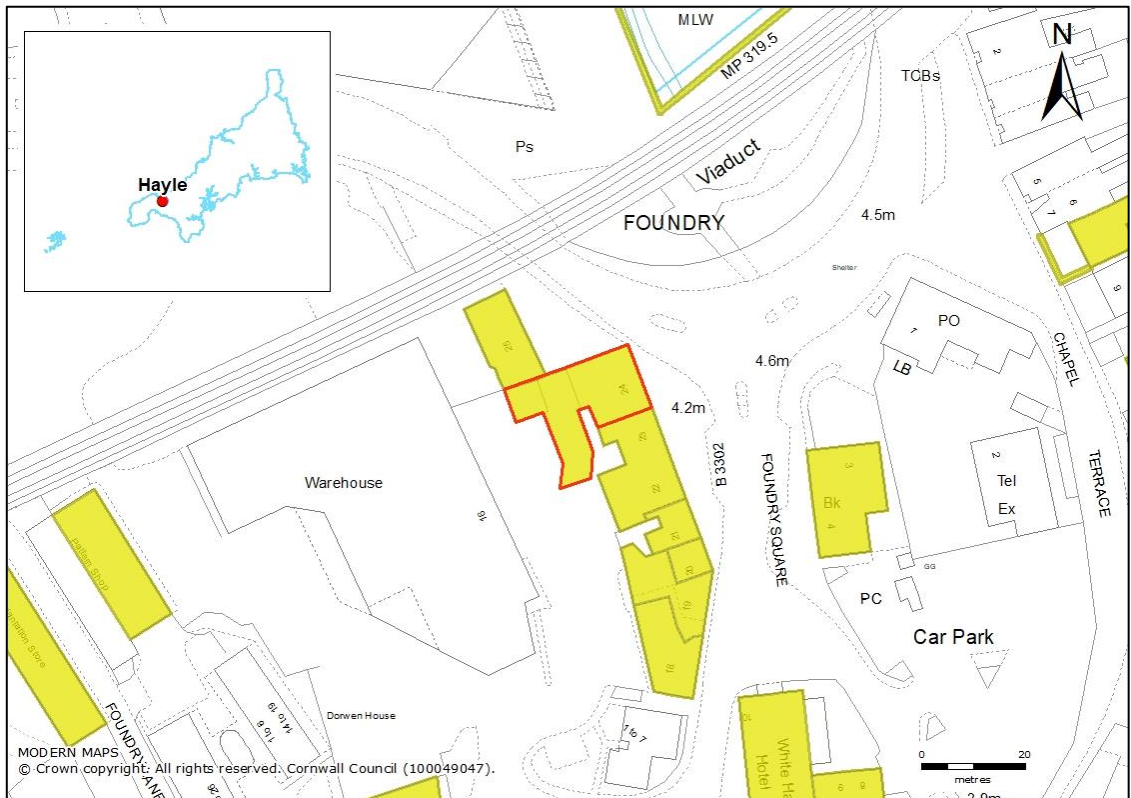


Fig 2 Site extent (site outlined in red with listed buildings highlighted in yellow).

2 Introduction

2.1 Project background

Cornwall Archaeological Unit (CAU) was commissioned by Trevor Humphreys on behalf of Harvey's Foundry Trust to undertake an archaeological watching brief at John Harvey House, a Grade II* Listed Building (NHLE 1143685) located at Hayle in west Cornwall (NGR: SW; 155826 037165 Figs 1 and 2).

This work was carried out to archaeologically record nine test pits excavated as part of an investigation into signs of subsidence in the building.

Planning and Listed Building Consent were not required for the works. However, the building is a significant heritage asset, and the scope of the works were specified and monitored by Cornwall Council's Senior Development Officer, Historic Environment Planning.

Further details of the background and the aims and methods of the project can be found in the Project Design reproduced here in Appendix 1.

2.2 Aims and objectives

The principal aim of the study was to gain a better understanding of the surviving buried archaeological resource at John Harvey House and to create a record of any archaeological features exposed in the test pits.

Objectives included to:

- To record all archaeological remains exposed at the site, including the collection of artefacts.

Research objectives included to:

- To ascertain the character, date and extent of any subsurface remains within the open pits.

2.3 Methods

2.3.1 Desk-based assessment

A rapid desk-based assessment was carried out to inform the fieldwork stage. This was guided by CIfA's guidance on undertaking desk-based assessment (CIfA 2017) and comprised a study of the following:

- Readily available published sources.
- Historic maps, including
 - OS 1-inch survey (c1810),
 - Parish Tithe maps (c1840),
 - 1st and 2nd Editions of the OS 25-inch maps (c1880 and c1907).
- Modern maps.
- GIS data accessible to CAU.

2.3.2 Fieldwork: Archaeological recording

All recording work was undertaken according to the Chartered Institute for Archaeologists Standards and Guidance for Archaeological Investigation and Recording (CIfA 2014a; 2014b; 2014c; 2017).

Excavation of the trial pits was undertaken without archaeological supervision, on the understanding that should any features such as historic surfaces or structures be encountered, they were to be left *in situ* until an archaeologist was present to record them.

The full details of the archaeological recording and post-fieldwork methodology are outlined in the accompanying Project Design (Appendix 1).

3 Location and setting

John Harvey House is located within Foundry Square at the south-western end of Hayle at NGR: SW 5582 3716 (Fig 1 and Fig 2). The ground floor of the building once served as a showroom/shop for Harvey's Foundry and the upper floor was designed as a suite of offices and accompanying strongrooms. On the roof of the building is a clock tower which still contains its clock. This clock presumably once governed the lives of all who worked in the foundry, the adjacent shipyard and indeed this end of Hayle, most of which was owned by the Harvey company. A tramway linking the Harvey's shipyard complex with the foundry once ran through an arched corridor to the rear of the showroom (in the location of test pits 3, 8 and 10, Figs 8 and 11). The ground floor of the rear wing of the building (beyond the tramway) contains fabric from the early foundry site. A timber wing structure at first floor level and supported on iron piers above the tramway once formed the drawing office for the foundry (Thomas 2004).

The building lies at the north-eastern corner of the foundry complex, approximately 80m south of Penpol Creek, which was converted to a Canal to serve Harvey's Foundry and is adjoined by two Grade II Listed Buildings on either side.

The underlying geology in the area is Porthtowan Formation, with mudstones and sandstones of the Devonian Period (BGS 2022).

4 Designations

John Harvey House, 24 Foundry Square, is located within the Hayle Conservation Area and Cornwall and West Devon Mining Landscape World Heritage Site: Port of Hayle.

The building is a Grade II* Listed Building, List Entry Number: 1143685. The listing description is as follows:

Foundry office and remains of foundry. Late C18 and early-mid C19; built by Harvey and Company; altered late C20. Stuccoed stone and boarded timber frame. Hipped grouted scantle slate roof. Brick axial stack. Slate-hung clock turret left of centre with moulded eaves cornice to pyramidal roof with gablet over each clock face. PLAN: L-shaped on plan main office range incorporating C18 foundry entrance, furnaces and limekiln; rear right-hand [SW] wing added in early-mid C19 as drawing office. EXTERIOR: 2 storeys. 4-window north front with large round-arched carriage doorway under the right-hand window. Window to each centre bay, blind left-hand bay (ground floor). Original 12-pane hornless sashes to first floor (including left-hand return). Circa early C20 windows to ground floor openings. Left-hand return wall has wide shop window. At rear weatherboarded drawing office wing raised on iron posts and with large 12-pane sash windows. INTERIOR: Substantial remains of part of original C18 foundry, including remains of a furnace, a lime kiln and part of original yard with cobbles and drain. Small part of original office, but mainly pre-1845 offices and in rear wing pre-1888 drawing office supported on cast-iron posts. Two large iron-plated armoured strong rooms supported on cast-iron piers and with cast-iron panelled doors and another strong room made of Barlow rails. Granite cantilevered stairs to office with cast-iron balustrade. Tiled lavatories. Part of the first floor of the main range has been removed. King-post roof over main front range. Clock in turret over main range made in 1893 by John H. West of Hayle, has illuminated dial.

5 Site history

John Harvey House was built as part of the headquarters of Harvey & Co. The building now incorporates remains of the former 18th century foundry complex associated with the casting shop to the rear on its the western side, which include a gated yard and walls surviving at ground floor level to the rear.

Gwinear blacksmith John Harvey moved to Hayle in 1779 to establish a foundry and engineering works. The company employed up to 50 men by 1880, which specialised in manufacturing mine steam engines and other machinery.

The company was inherited by John Harvey's Son, Henry, who commenced a period of expansion making Harvey's Foundry one of the largest manufacturers of engineering equipment within Cornwall, with a world-renowned reputation (Smith 1999).

The foundry site is of international significance for the role it played in the production and export of mining equipment such as beam engines, waterwheels, compressors and ore processing machinery during the 18th and 19th centuries. This foundry also had links with steam engine pioneers such as Trevithick, Woolf and West (Thomas 2004).

Harvey's Foundry was at its peak output between 1820 and 1870, which had a major impact on the development of western Hayle and employed a large proportion of the town's inhabitants.

However, by 1880, the decline in Cornish mining had dramatically affected the fortunes of local foundries and most of them ceased to operate. Harvey's diversified into shipbuilding and consolidated its coal importing and distribution business, as a result expanding its workforce to 1,200. The shipbuilding venture proved a failure, however, and the foundry business was run down and finally closed in 1903. Harvey and Co continued in business as a builder's merchants, merging with UBM in 1969. Although some significant foundry remains are extant, the majority have been demolished following closure, particularly during the 1970s (Sharpe 2017).

The c1790 map of Hayle first shows the site in detail, with foundry buildings, gated yard and offices on the site of 24 Foundry Square (Fig 3).

By 1815 the offices had been extended eastwards towards the road and a new frontage added with a curved north east corner. This is shown on the 1815 foundry plan (Fig 4) along with the gated yard to the west of the shop/offices and foundry buildings on the west side of the yard. By 1835 the curved north east corner of the shop/offices had been altered to form a squared footprint. This is visible on the 1835 foundry plan (Fig 5) and the c1840 St. Erth Tithe Map (Fig 6). This is also shown by an 1845 engraving of Foundry Square (Fig 7), the 1880 OS map (Fig 8) and photograph taken in c1883 showing a modified shop front and window added to the upper floor of the offices (Fig 9). The c1880 OS map (Fig 8) shows that at some point between c1840 and c1880 a tramway ran through the gated yard which by that time had been covered at first floor level by the addition of a drawing office.

The 1907 OS map (Fig 10) shows the Foundry as disused, with the majority of the buildings still extant. However, by the time of the 1936 OS map substantial demolition had been undertaken to the foundry site, which is most apparent to the casting shops to the rear of 24 Foundry Square (Thomas 2004).

The Harvey company left 24 Foundry Square in 1960, with the building subsequently used for other commercial enterprises before falling in to disrepair. The building was redeveloped in 2004 as part of Harvey's Foundry redevelopment scheme. As part of these works the area around test pits 1 and 2 was partially excavated revealing a surface of granite setts associated with the foundry complex.

6 Archaeological results

The results of the watching brief are presented below by test pit, of which there were nine in total (See Figs 11–38).

| Test pit | Dimensions of test pit (Length x width x depth) | Description |
|----------|---|---|
| TP-1 | 1m x 1.1m x 0.68m | <p>TP-1 adjoined an external stone wall associated with the foundry complex (101). This area had been previously disturbed by the 2004 works and contained two modern timber planks (102) and modern concrete blocks (103) in the redeposited overburden. At the base of the test pit a cast iron rising main was reused as a column to support the drawing office at first floor level. The column was positioned directly on top of an undisturbed lime floor surface (104) associated with the foundry buildings at a depth of 0.68m from the present ground surface.</p> |
| TP-2 | 1m x 1.1m x 0.56m | <p>TP-2 was excavated down to the top of a granite flagstone floor (205) associated with the foundry complex. This was present at a depth of 0.56m below the present ground surface. Within the floor a granite pad (206) edged with bricks supported a cast iron rising main (204) that had been reused as a column to support the drawing office at first floor level. The granite floor was overlain by a layer of orangey brown clay silt containing frequent fragments of lime (203) approximated 0.15m deep.</p> <p>This was overlain by a dumped deposit of dark greyish black coal, silt and stone fragments (202) approximately 0.2m deep, which in turn was overlain by a modern mid greyish brown topsoil and gravel (201) (0.3m deep).</p> |
| TP-3 | 1.6m x 0.59m x 0.42m | <p>TP-3 was excavated within the former gated yard at the running through the building where the 19th century tramway had once been located. It was excavated down to a depth of 0.42m where two cast iron water pipes were visible overlain by a layer of concrete. The pipe aligned east west (304) clearly predated that aligned north south (303) since it had been truncated when (303) was inserted. Pipe (304) was set in a brick sided trench and pipe (303) was overlain by a thin layer of concrete (302).</p> <p>A layer of greyish brown silty clay containing fragments of stone approximately 0.1m deep (306) overlay concrete (302) and above this were modern paving slabs (301). Running along the north side of the trench is a modern surface drainage gully built from granite setts (305).</p> |
| TP-4 | 2m x 0.56m x 0.42m | <p>TP-4 was excavated against the north west elevation of the building. It was excavated down to a mid-greyish brown natural (404) at a depth of 0.42m.</p> <p>This was overlain by light brown silty clay (403) which contained stone and brick rubble (404 and 405) at the</p> |

| | | |
|-------|-----------------------|---|
| | | south west end of the trench. Above this was a light brown sand levelling layer (402) which was overlain by concrete surface (401). |
| TP-5 | 0.6m x 0.56m x 0.41m | TP-5 was excavated against the north west elevation of the building below a window jamb. It was excavated down to a natural layer, a yellowish-brown silty clay at a depth of 0.41m (503). In the north-west facing section was a former jamb or quoin (501) occupying the western half of the section and associated with an earlier element of the building. Above the natural (503) elsewhere and seen in the eastern half of the section was a layer of mid greyish brown silty clay with moderate stone and slate fragments (502). Overlying this was a modern concrete surface. |
| TP-6 | 0.59m x 0.57m x 0.76m | TP-6 was located at the north east corner of the building. It contained a dark greyish brown silty clay with moderate stone and slate fragments and was excavated down to a depth of 0.76m (602). This was overlain by a modern concrete surface. The footings of the building were revealed in the north facing section and were visible reaching to the base of the trench. |
| TP-7 | | Not used. |
| TP-8 | 1.2m x 0.64m x 0.76m | TP-8 was located in the covered passage. The eastern half of the test pit was excavated down to dark greyish brown clay silt at a depth of 0.76m (806). This was overlain by a thin layer of cream coloured sand (805) which in turn was overlain by a thin layer of coal dust (804). The western half of the test pit was taken down to a slate-lined drain (807), aligned north-south. This had a V-shaped base lined with slate and brick sides bonded with a cement mortar. The drain was covered with iron plates and above this was a layer of mid greyish brown silty clay (803). Adjoining this layer to the west was a layer of concrete (802). Modern paving slabs (801) overlay the entire test pit. |
| TP-9 | 0.63m x 0.59m x 0.58m | TP-9 was excavated down through a surface of granite setts (901) which overlay demolition rubble (902) containing some large granite and slate stones. It reached a depth of 0.58m. The test pit contained an iron pipe (903) set vertically against an east wall of the building. |
| TP-10 | 1.3m x 1.1m x 0.54m | TP-10 was L-shaped in plan, excavated down to a depth of 0.54m in the eastern part of the test pit. Running north-south along the western side was an iron pipe (1005), with a possibly associated brick wall bonded with cement mortar (1004) running parallel with it on its eastern side which had been truncated towards the north. A slate floor (or base of the pipe trench) (1006) adjoined the western side of the brick wall. The slate floor and the area to the east of the wall were overlain by a layer of greyish brown silty clay with small fragments of stone (1003). This was overlain by a layer of modern hardcore (1002) which in turn was overlain by modern paving and cement (1001). |

7 Discussion

The archaeological recording work provided an opportunity to assess the below-ground potential for surviving archaeological features associated with Harvey's Foundry and John Harvey House.

Test pitting revealed surviving floors associated with the former foundry complex at the rear of John Harvey House, with sections of cast iron rising mains reused as columns supporting a 19th century first floor drawing office placed on a lime floor surface in TP-1 and a granite base set in a granite flagstone floor in TP-2. The floors survived at depths of between 0.55m and 0.7m below the present ground surface.

A number of 19th or 20th century cast iron water pipes were identified in test pits 3, 9 and 10 and a late 19th or 20th century slate-lined culverted drain identified in test pit 8.

There were no artefacts recovered during the course of the work.

8 References

8.1 Primary sources (in chronological order)

c1790 Map of Hayle. (Licensed digital copy at CRO)

Tithe Map and Apportionment, c1840. Parish of St Erth (licensed digital copy at CRO)

Ordnance Survey, c1880. 25 Inch Map First Edition (licensed digital copy at CAU)

Ordnance Survey, c1907. 25 Inch Map Second Edition (licensed digital copy at CAU)

Ordnance Survey, MasterMap Topography

8.2 Publications

British Geological Society, 2022. BGS Viewer.

Sharpe, A. 2017, Land north of 9, *Plantation Lane, Hayle - Archaeological watching brief*, CAU report 2017R059

Smith, J.R. 1999 *Harvey's Foundry, Hayle, Cornwall: archaeological assessment*, CAU report for Cornwall County Council

Smith, J.R. and Buck, C. 1995, *Foundry Square, Hayle - an archaeological and historical evaluation*, CAU report 1995R043

Sturgess, J. 2021, *John Harvey House, Hayle: Project design for trial pit recording*

Thomas, N. 2004, *No 24 Foundry Square, Hayle, - Historic Building Analysis*, CAU report 2004R062

8.3 Websites

<http://www.heritagegateway.org.uk/gateway/> Online database of Sites and Monuments Records, and Listed Buildings



Fig 3 Extract from a map of Hayle, c1790.

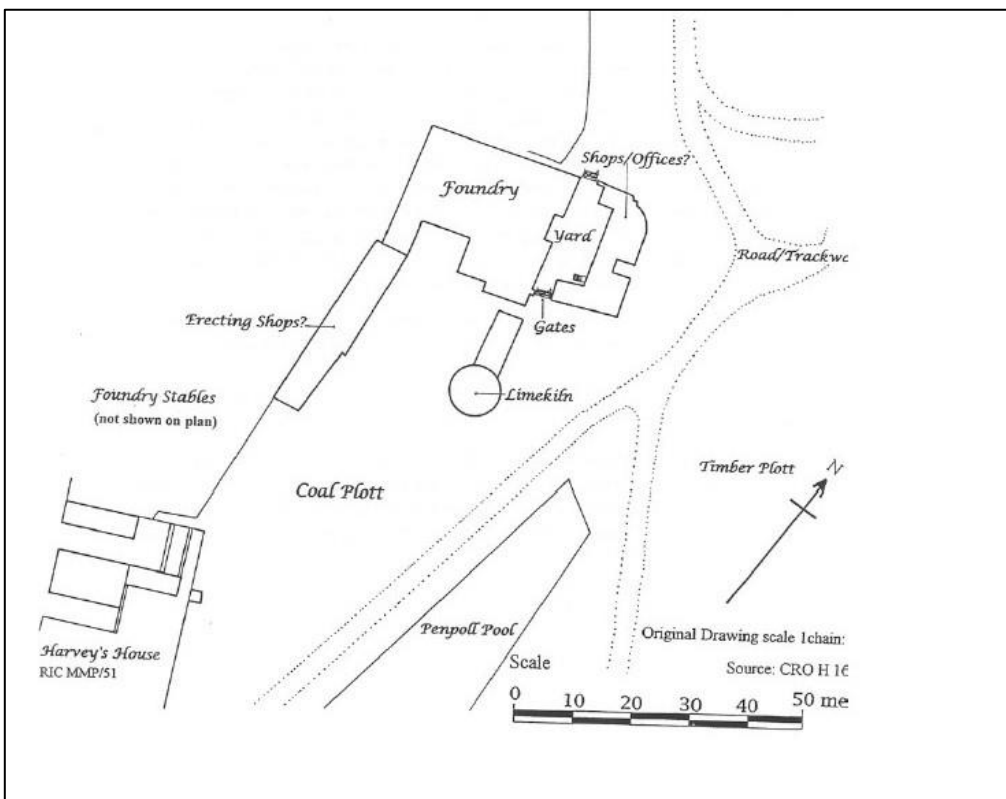


Fig 4 Plan of foundry in 1815.

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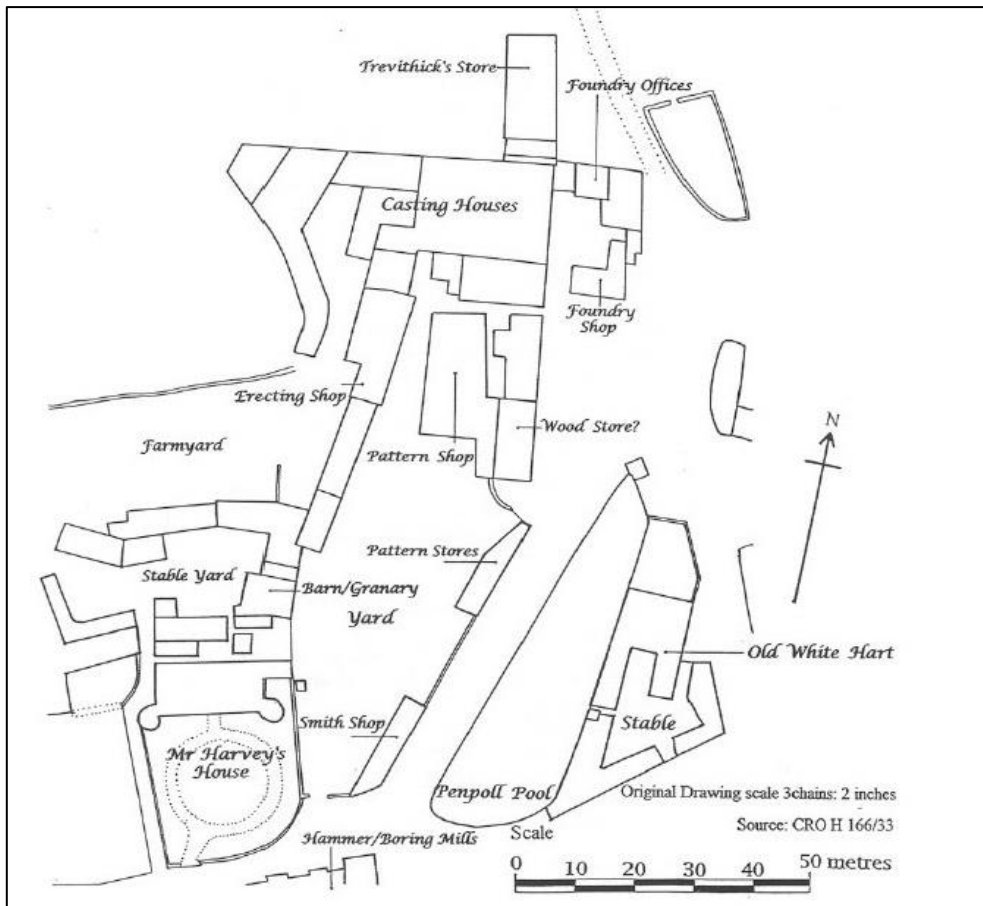


Fig 5 Plan of foundry in 1835.

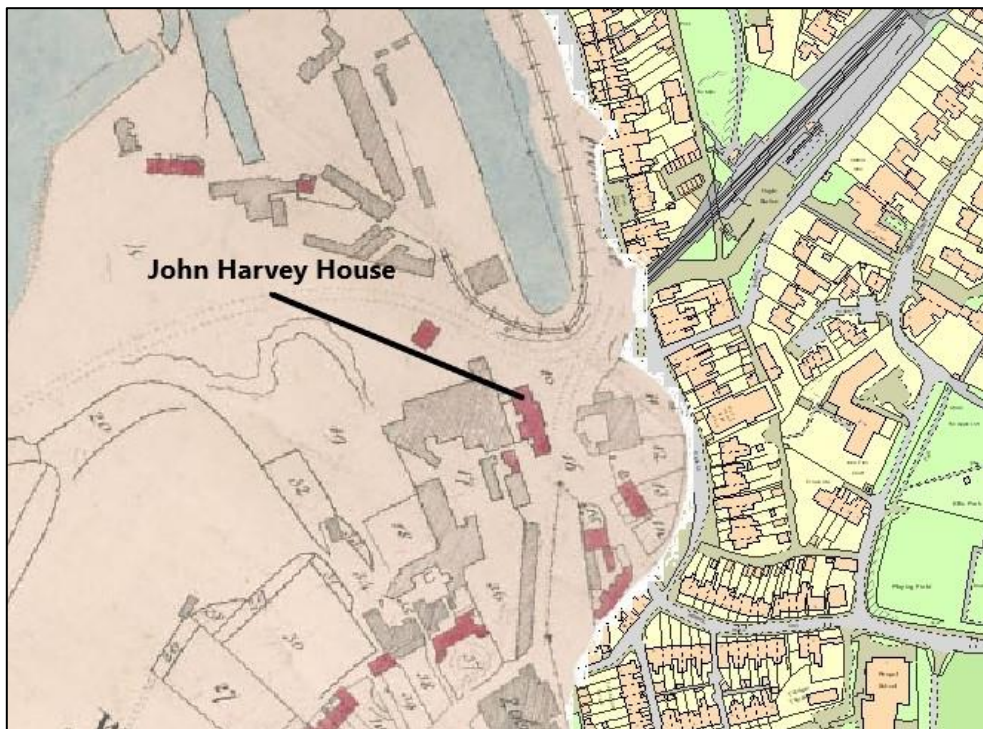


Fig 6 Tithe Map, c1840.

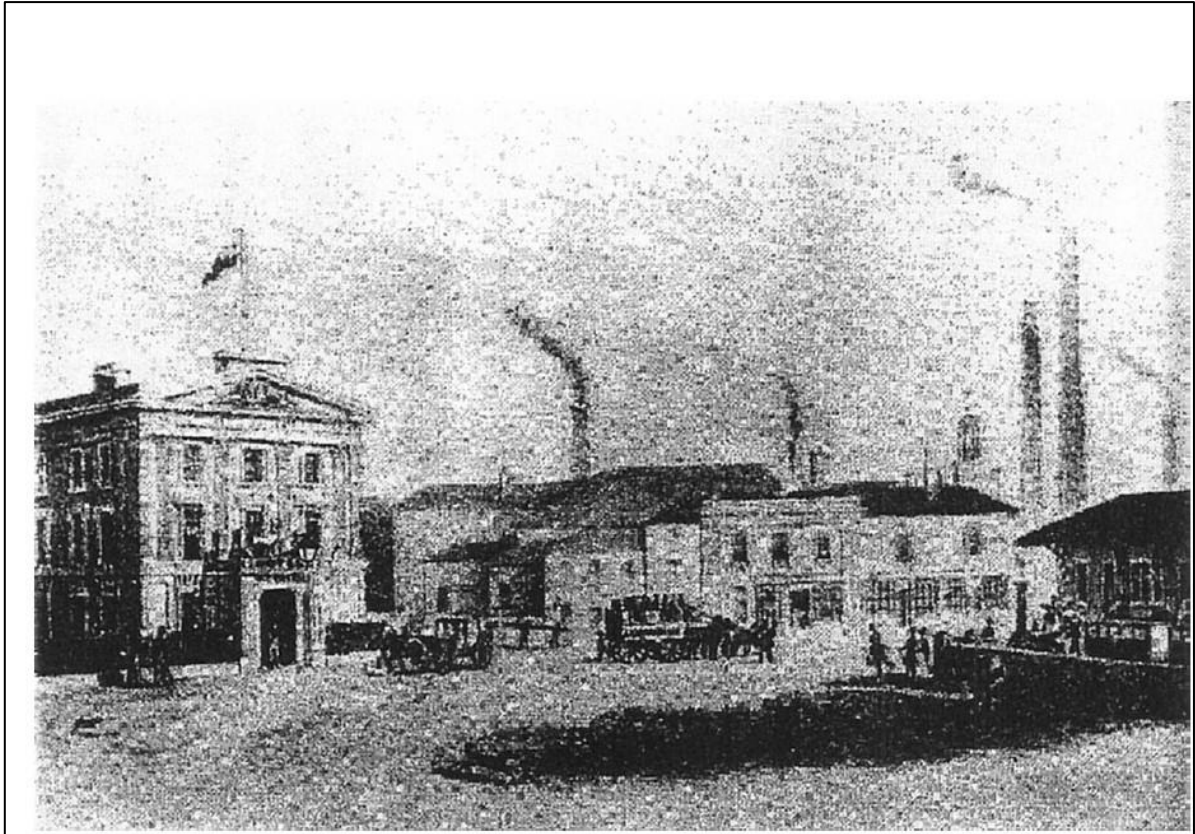


Fig 7 Engraving of Foundry Square, 1845.

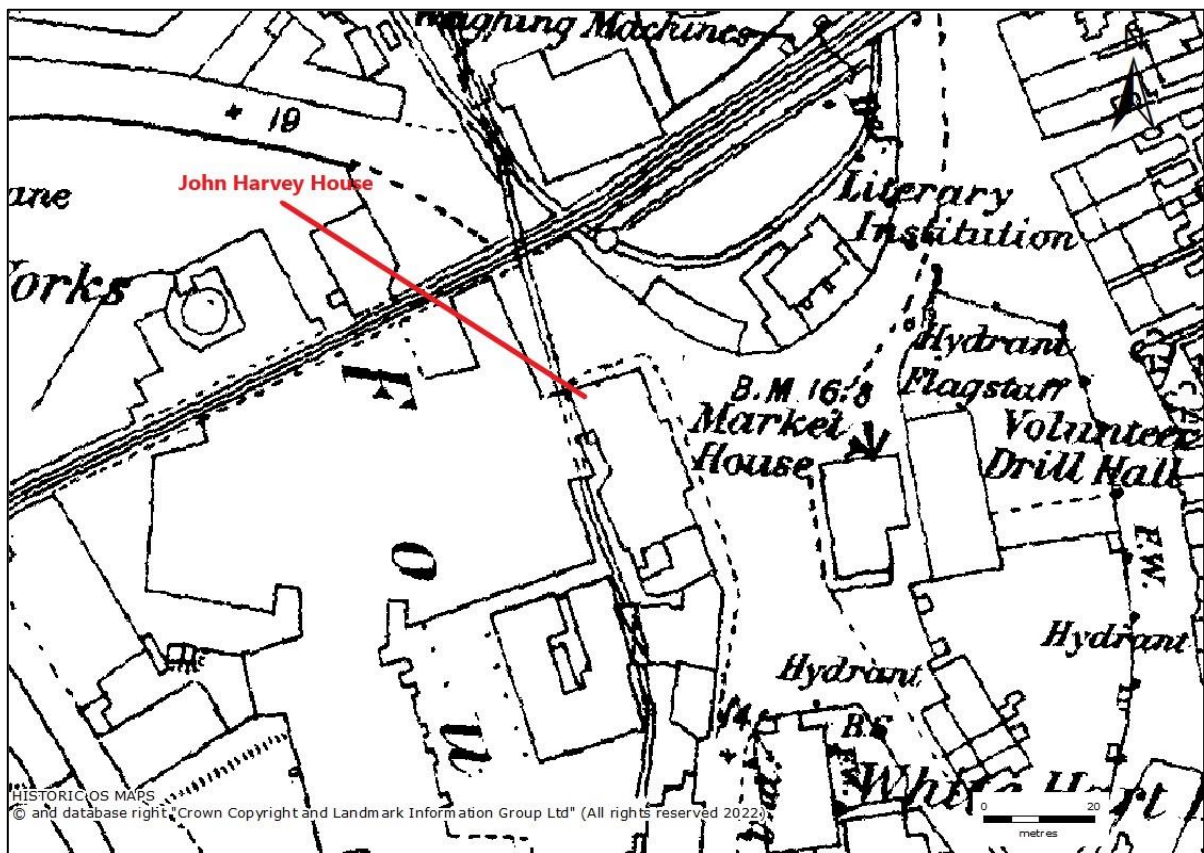


Fig 8 First Edition of the Ordnance Survey 25 Inch Map, c1880.



Fig 9 View from Foundry Square c1883.

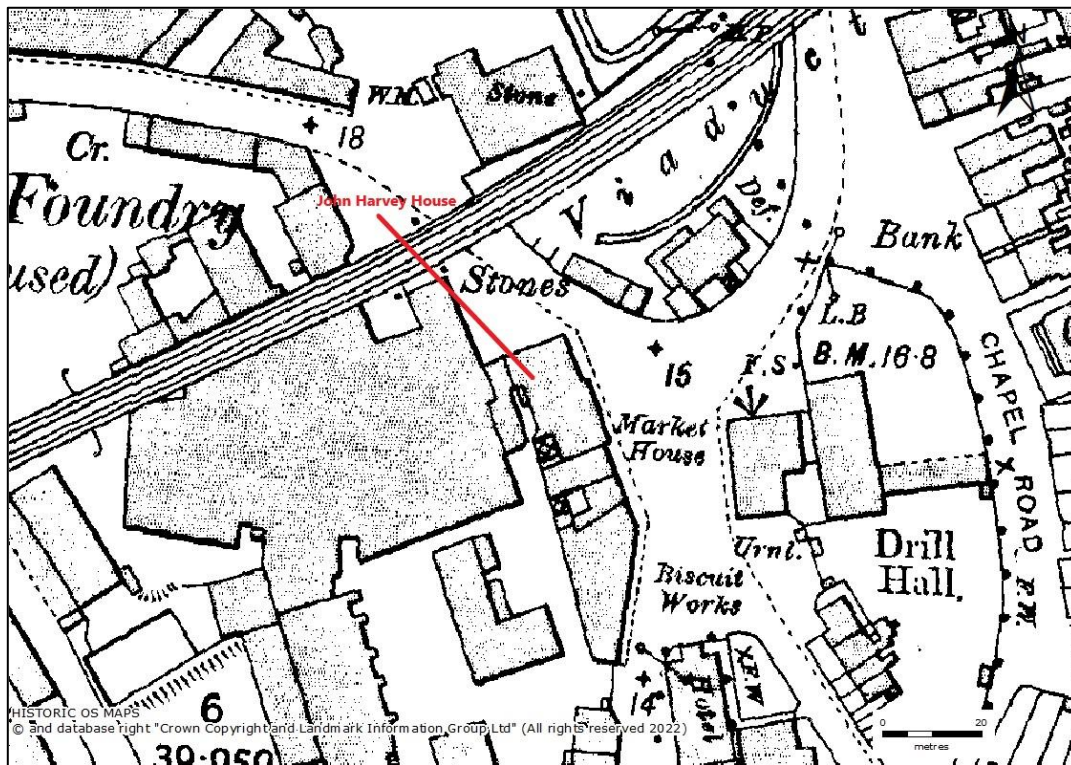


Fig 10 Second Edition of the Ordnance Survey 25 Inch Map, c1907.

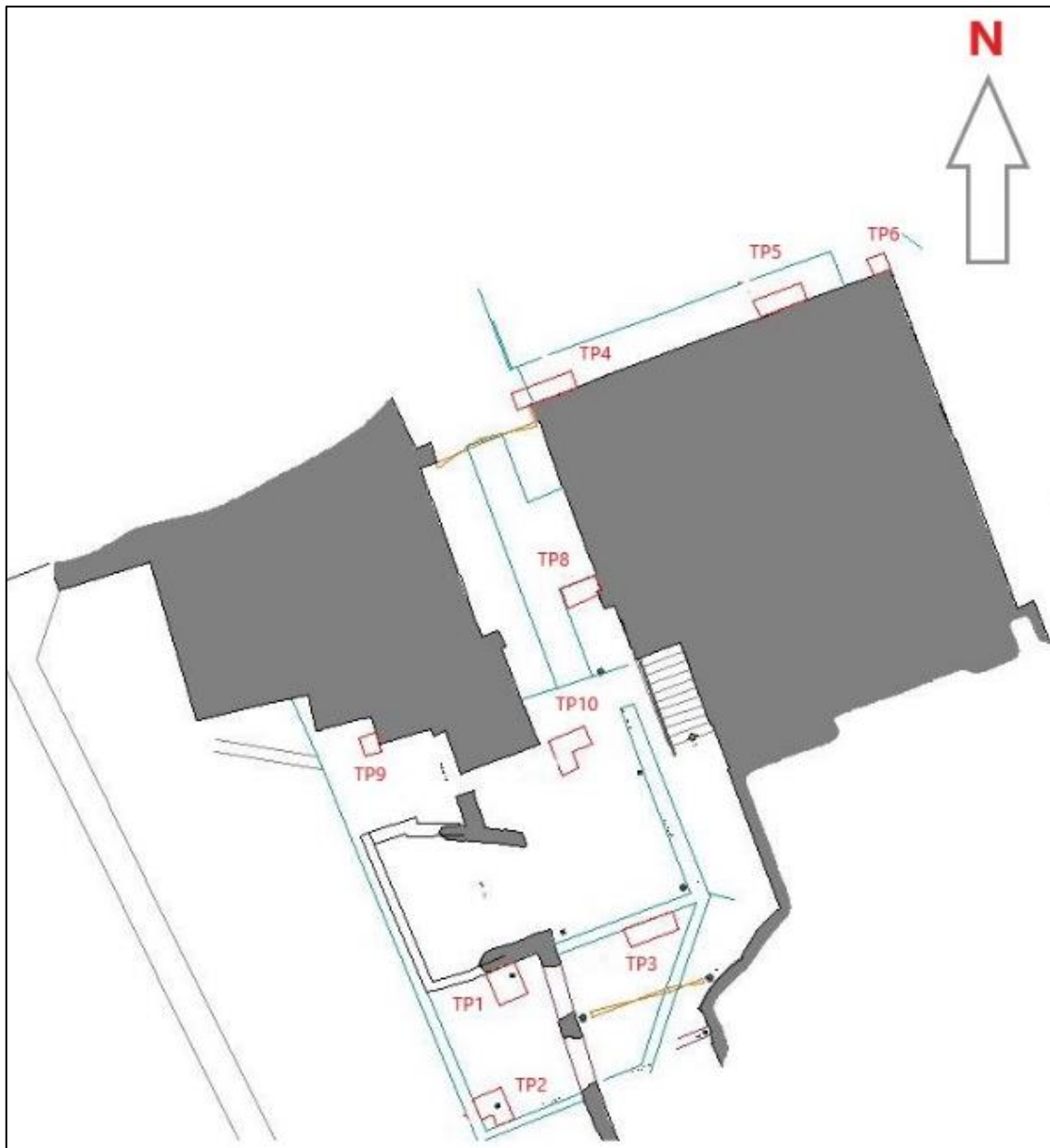


Fig 11 Location plan of test pits (outlined in red).



Fig 12 TP-1 (showing lime floor at base).

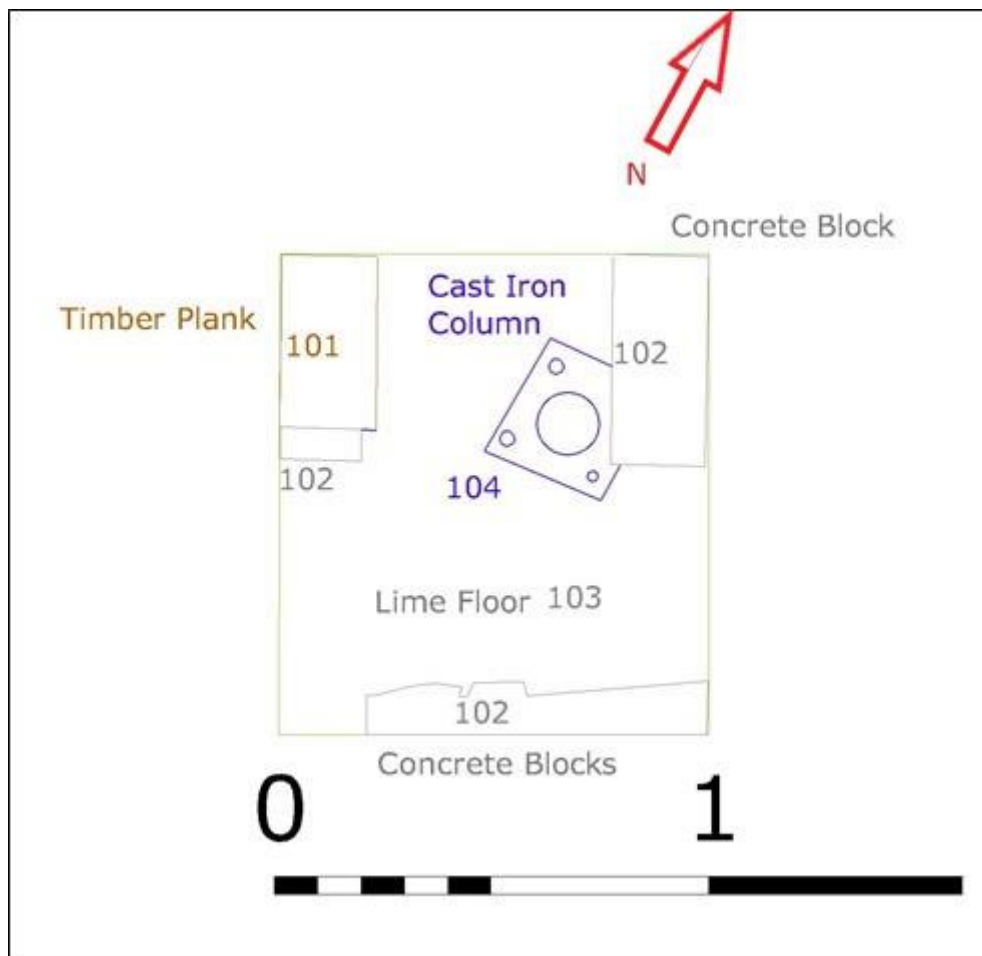


Fig 13 TP-1 plan.

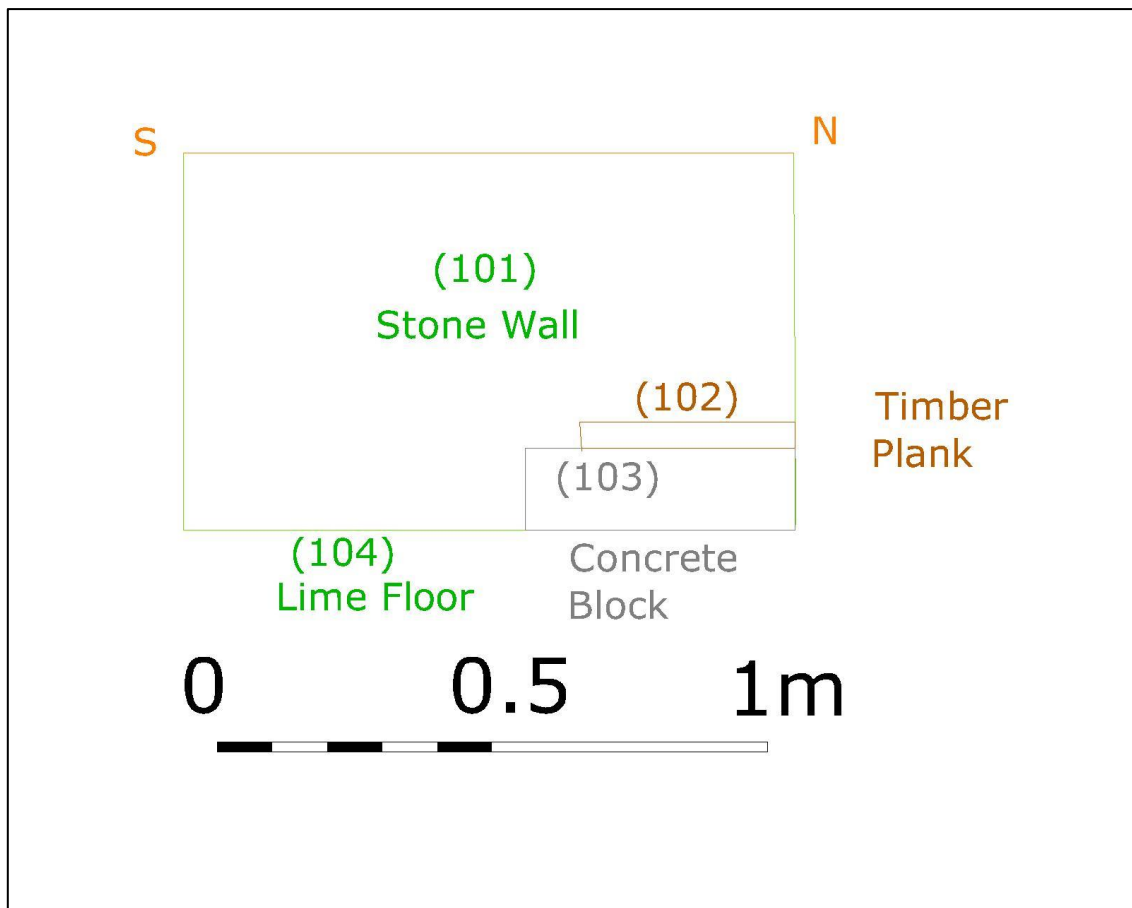


Fig 14 TP-1 section facing east.



Fig 15 TP-2.

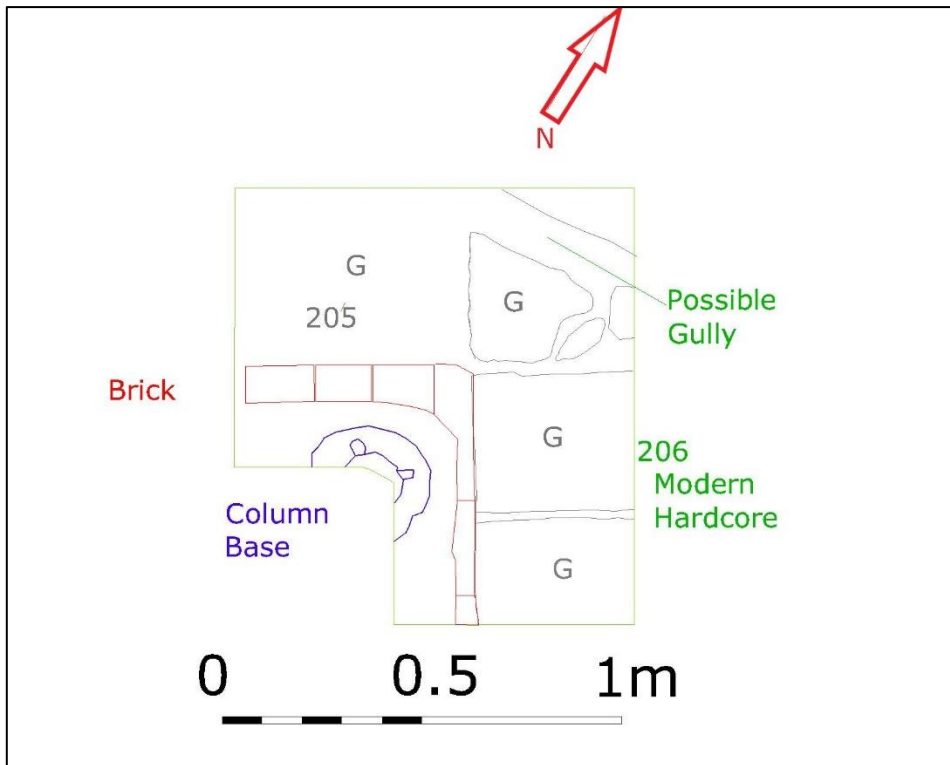


Fig 16 TP-2 plan.

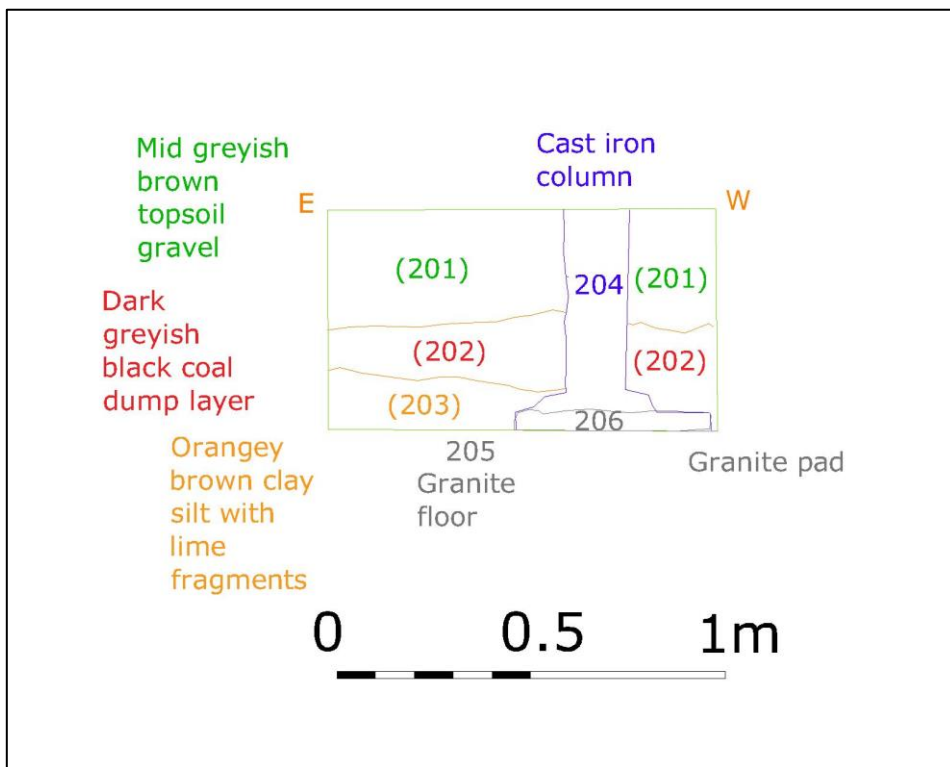


Fig 17 TP-2 section facing south.



Fig 18 TP-3.

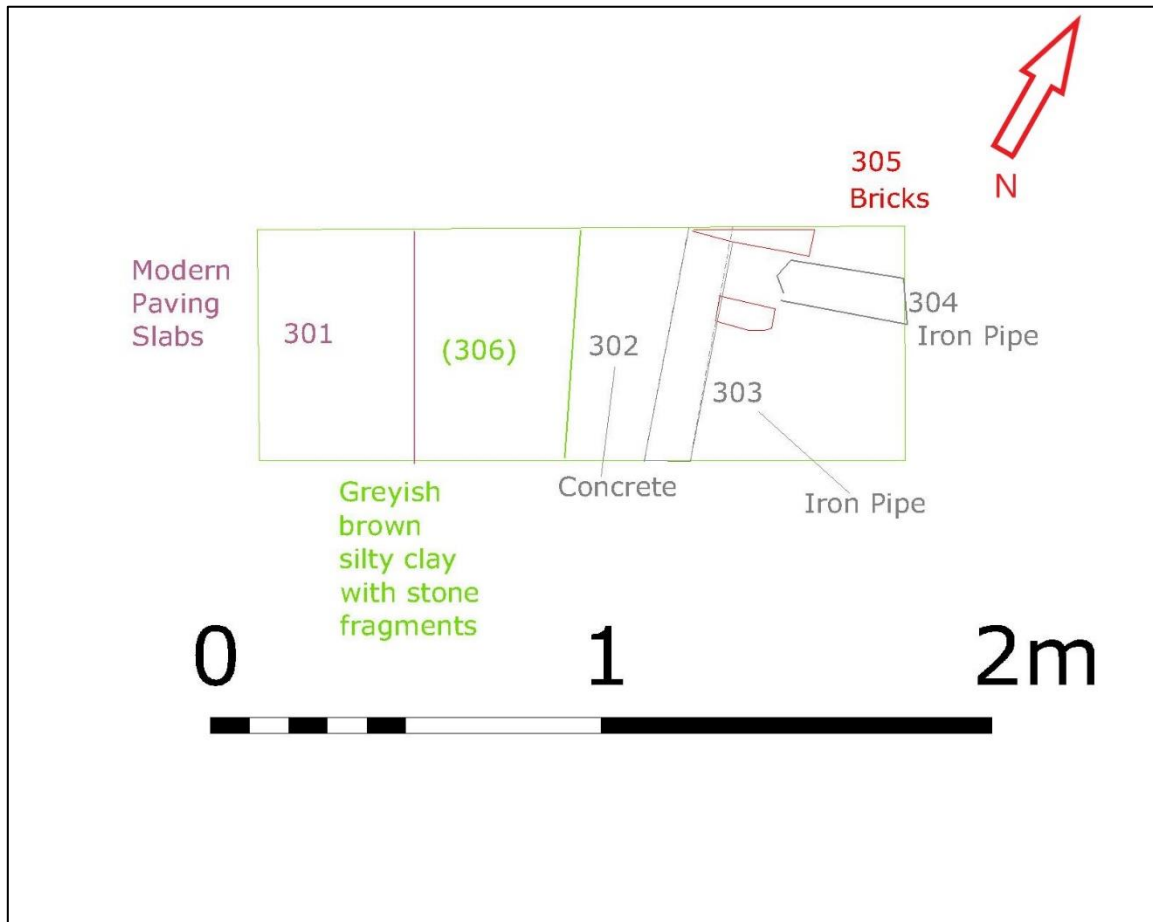


Fig 19 TP-3 plan.

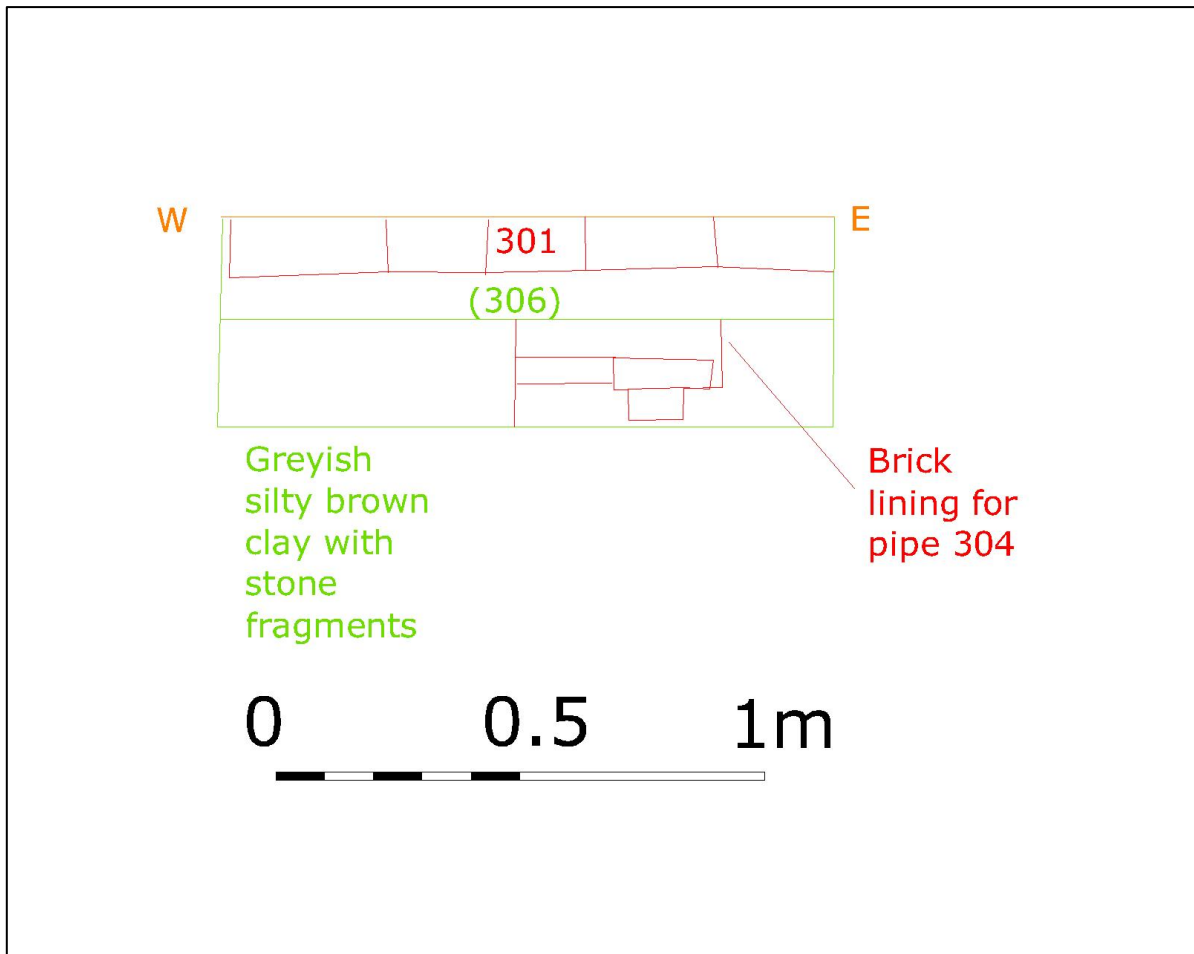


Fig 20 TP-3 section facing south.



Fig 21 TP-4.

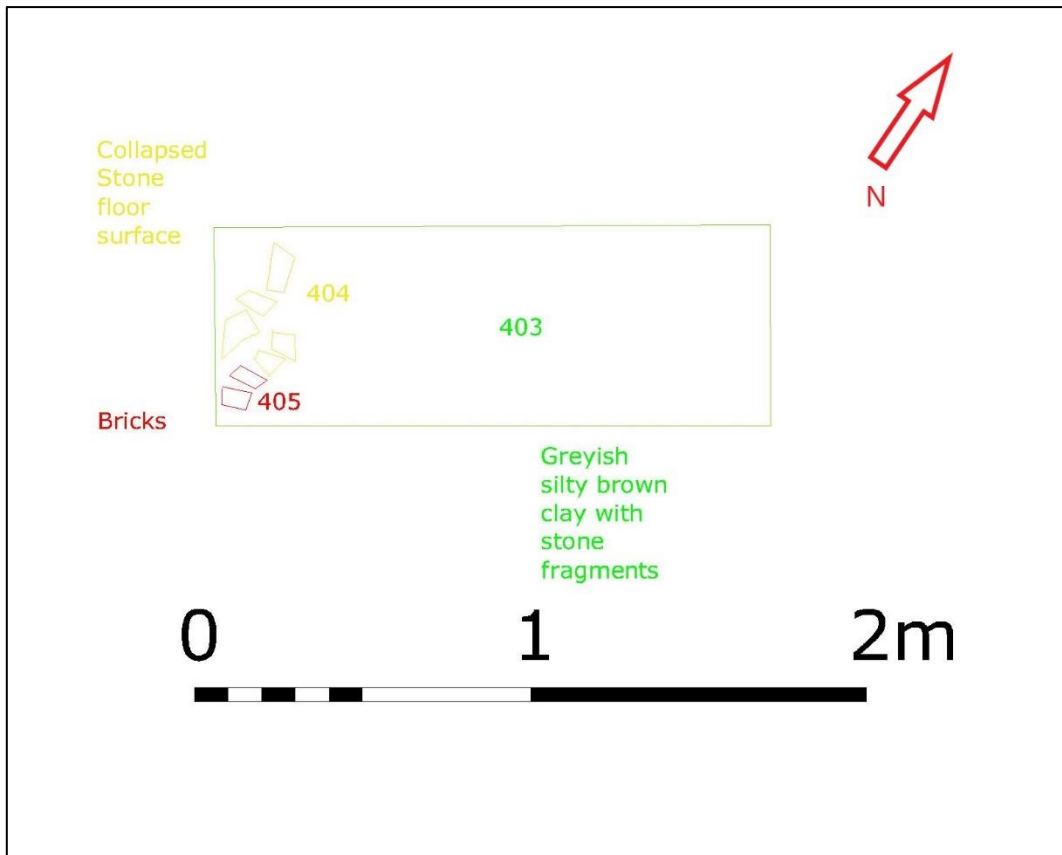


Fig 22 TP-4 plan.

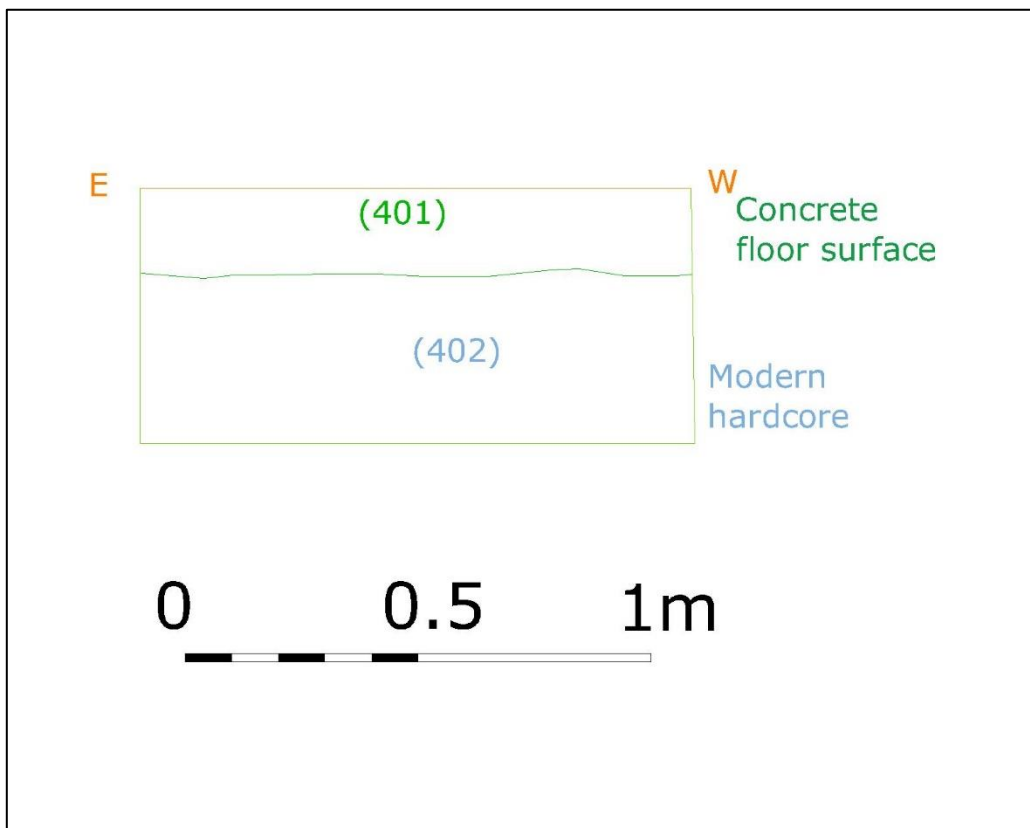


Fig 23 TP-4 section facing south.



Fig 24 TP-5.

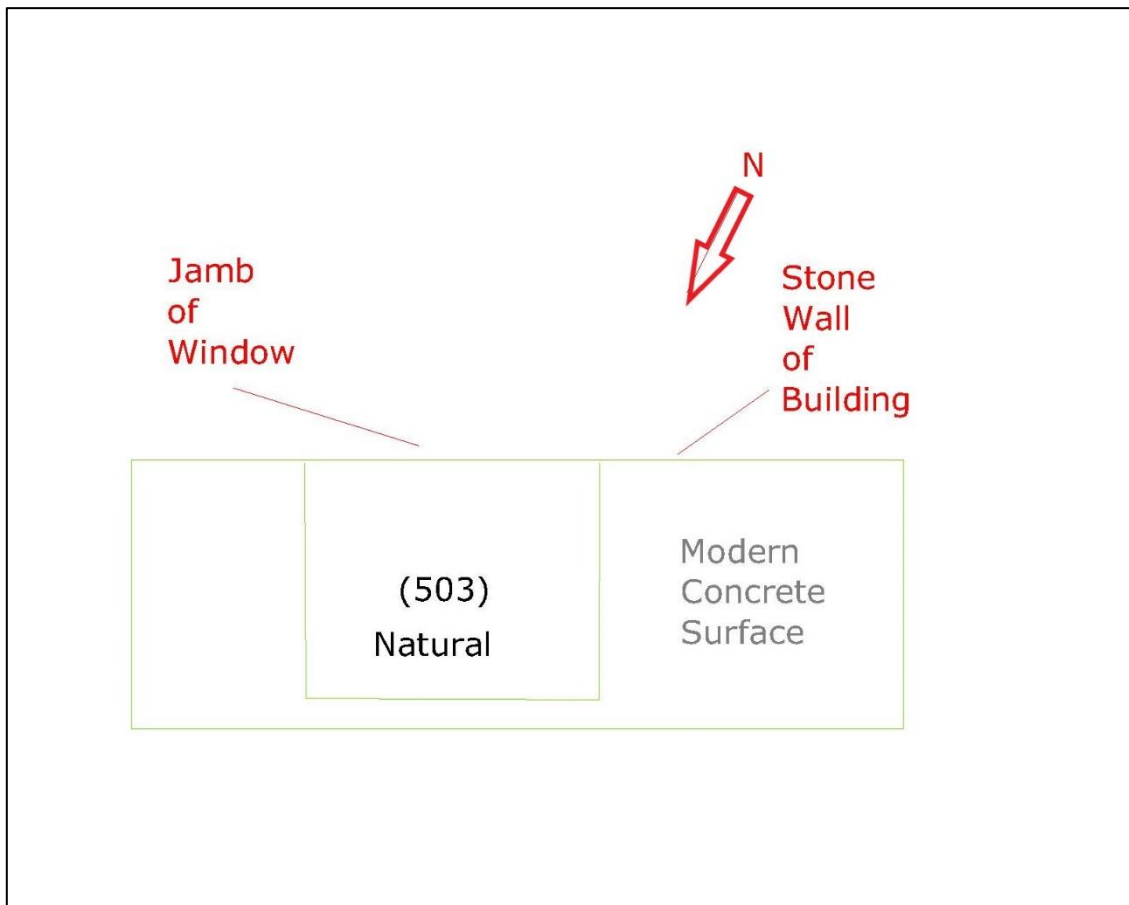


Fig 25 TP-5 plan.

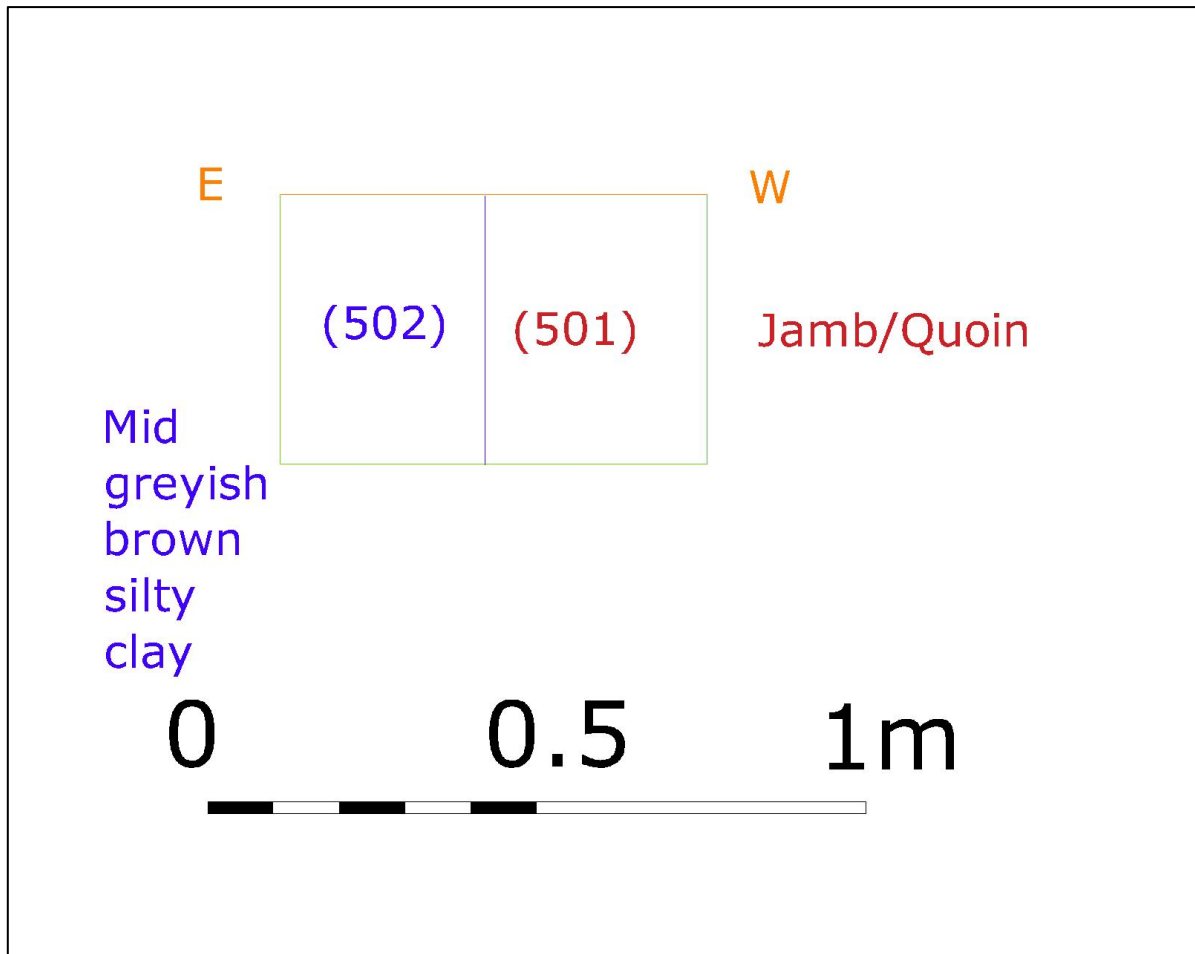


Fig 26 TP-5 section facing north.



Fig 27 TP-6

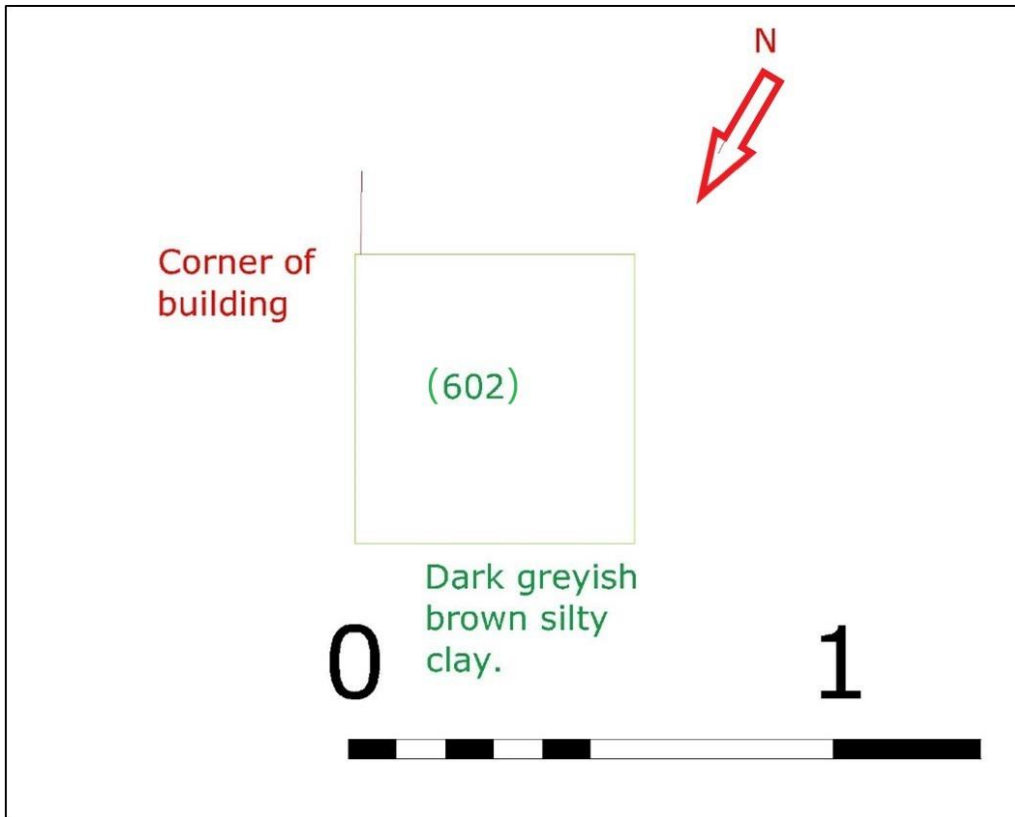


Fig 28 TP-6 plan.

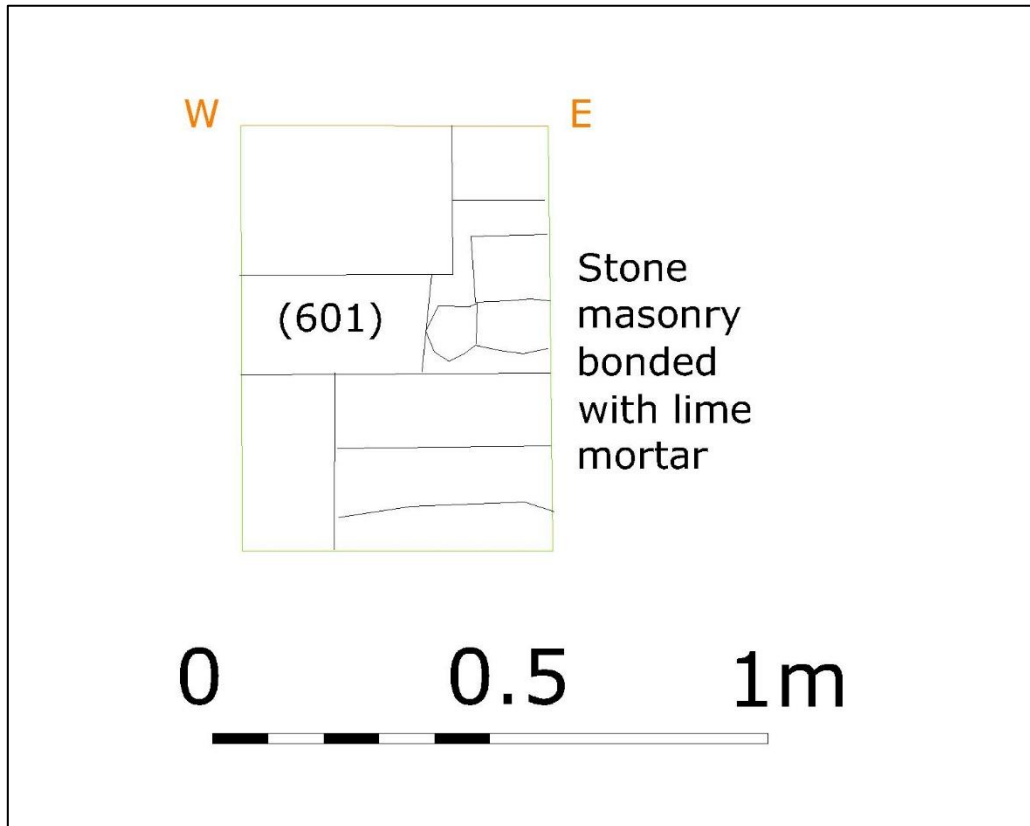


Fig 29 TP-6 section facing north.



Fig 30 TP-8

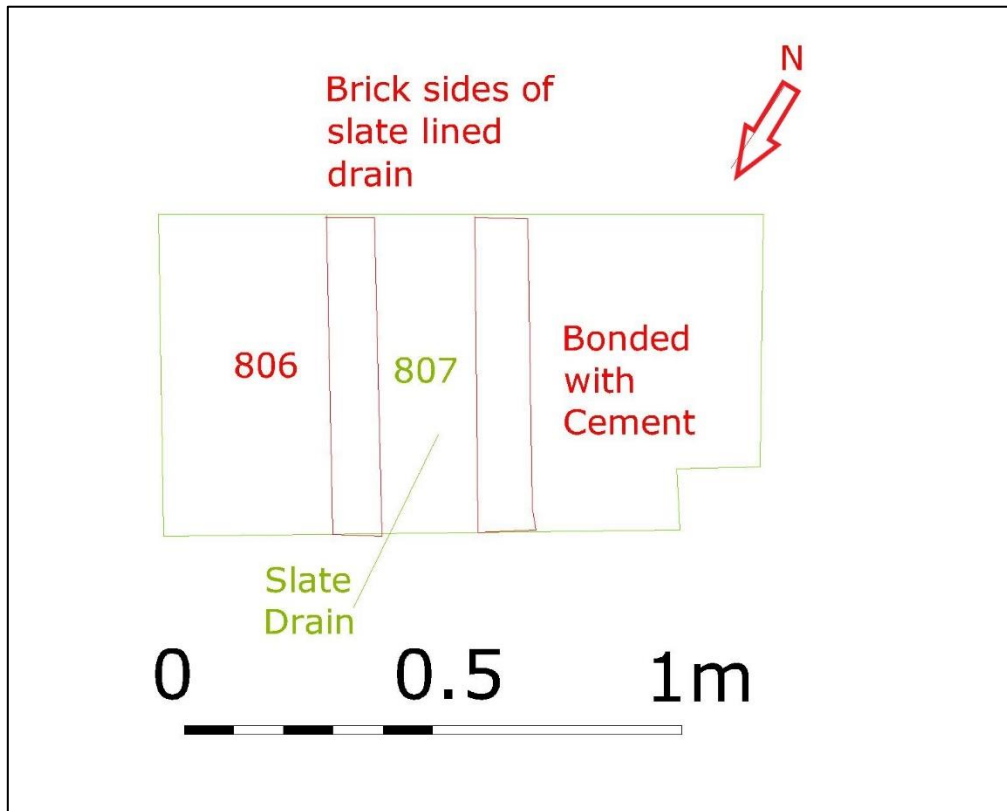


Fig 31 TP-8 plan.

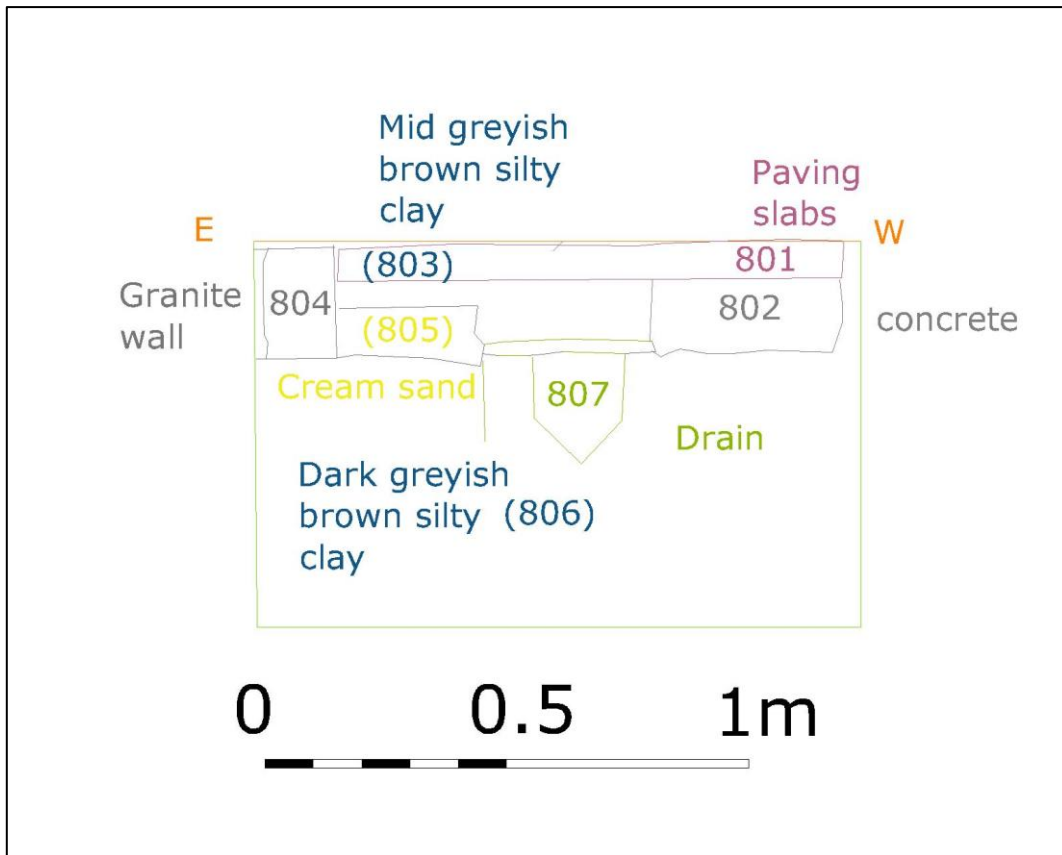


Fig 32 TP-8 section facing north.



Fig 33 TP-9.

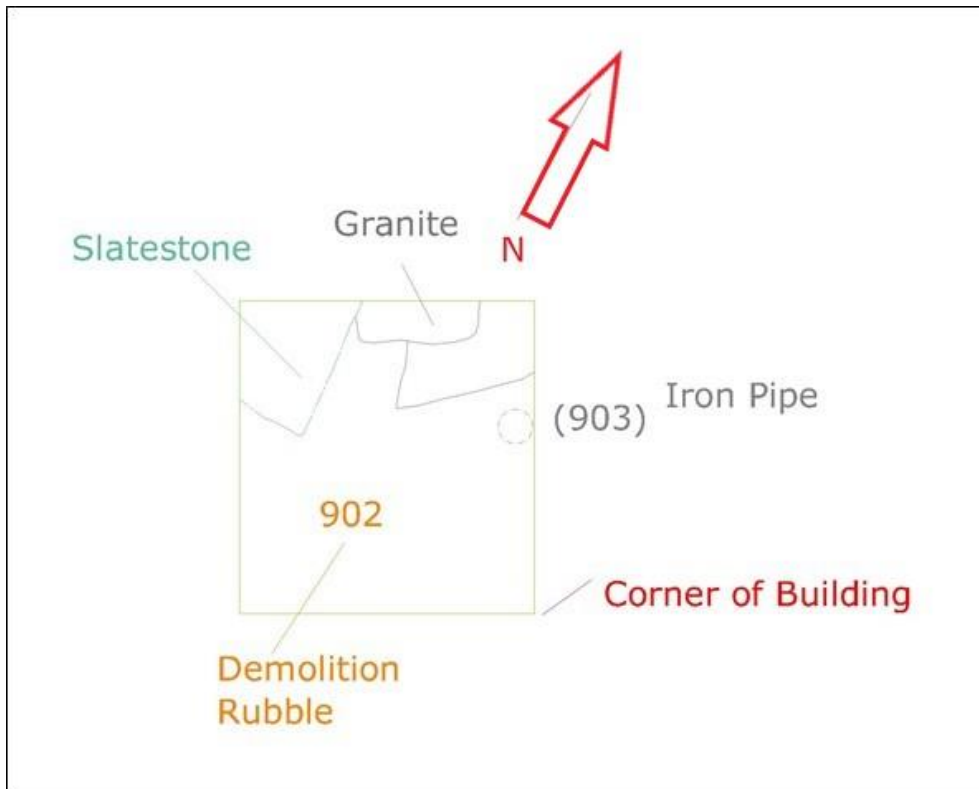


Fig 34 TP-9 plan.

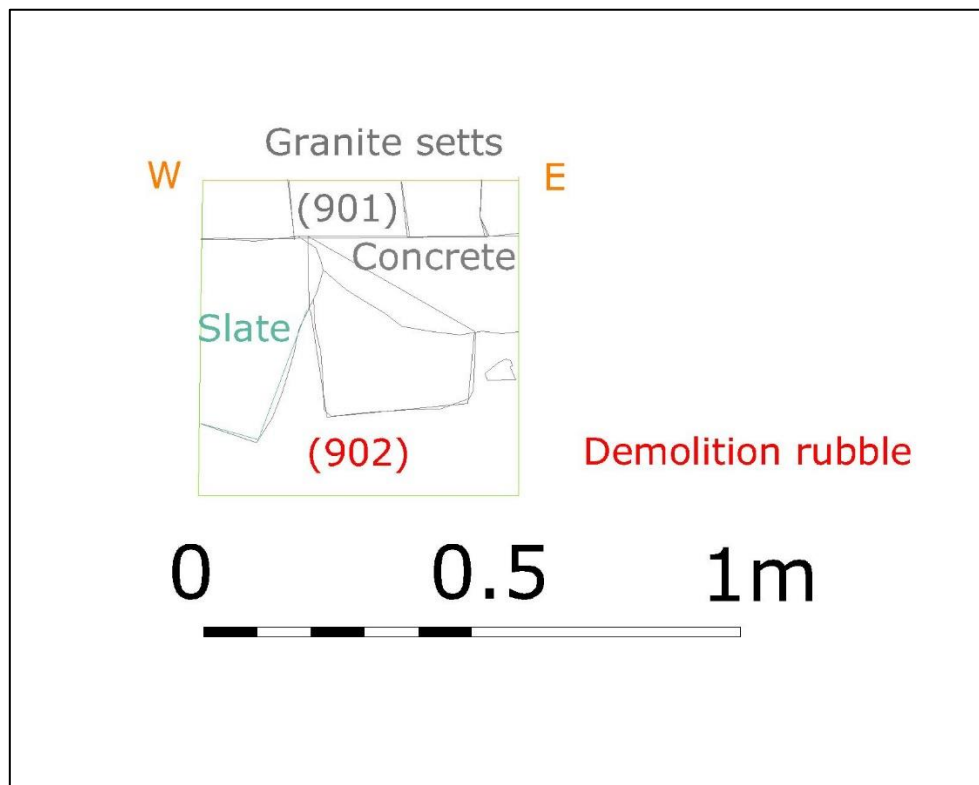


Fig 35 TP-9 section facing north.



Fig 36 TP-10.

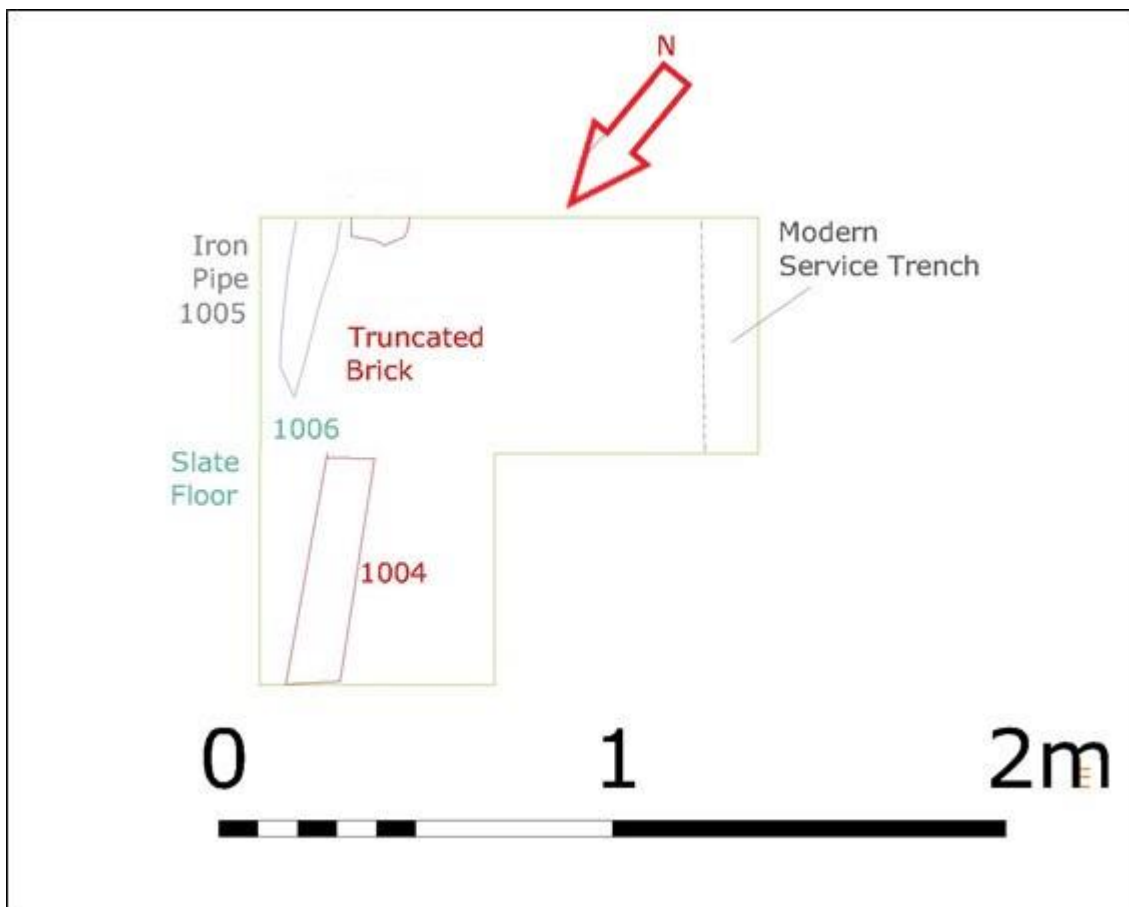


Fig 37 TP-10 plan.

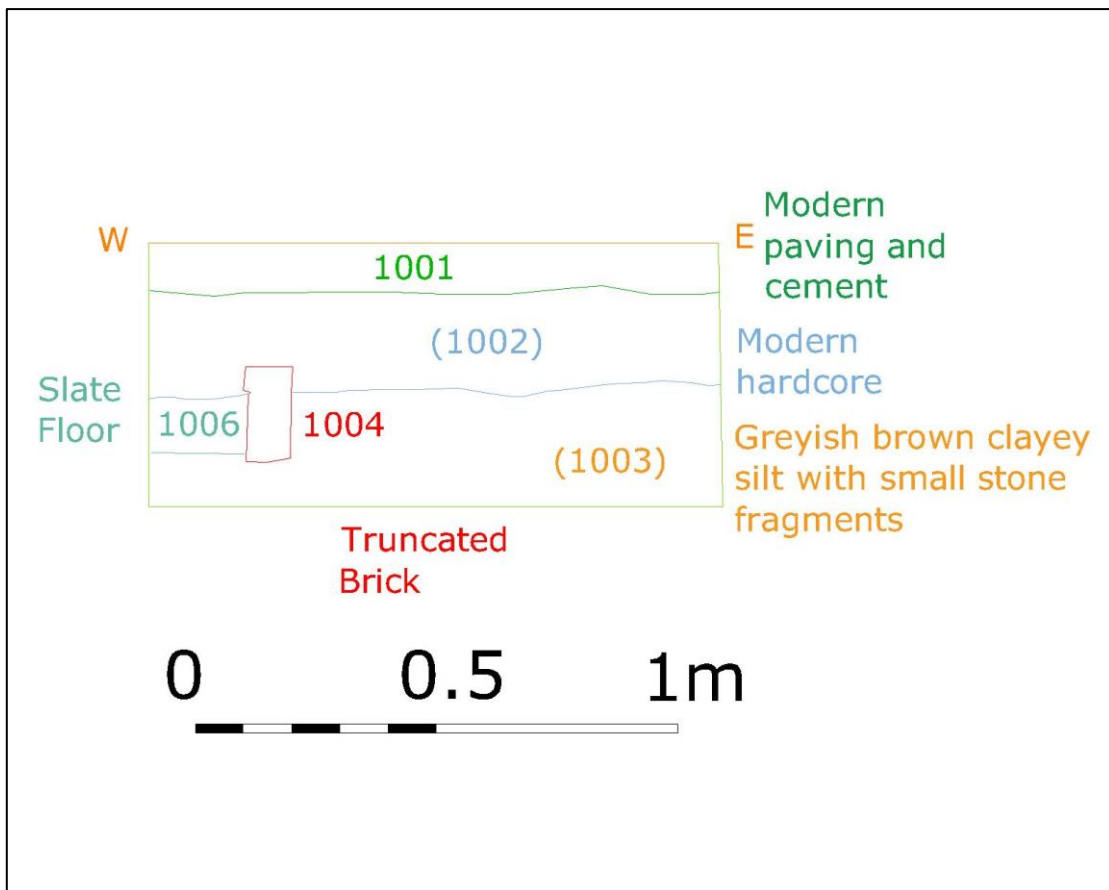


Fig 38 TP-10 section facing north.

Appendix 1: Project Design

John Harvey House, Hayle: Project design for trial pit recording

Client: Harvey's Foundry Trust

Client Contact: Trevor Humphreys

Project background

This document sets out a Project Design by Cornwall Archaeological Unit (CAU) for archaeological recording of trial pits at John Harvey House, 24 Foundry Square, Hayle (Figs 1 and 2).

John Harvey House is a Grade II* Listed Building; the former offices and remains of foundry buildings of Harvey and Co., Harvey's Foundry (List Entry Number: 1143685). The building dates to the late 18th century with early-mid 19th century extensions and alterations.

In order to investigate signs of subsidence, trial pits have been excavated in various locations around the building (see Fig 3). These pits have been left open to ensure that an archaeological record is made prior to reinstatement. The Harvey's Foundry Trust have now commissioned Cornwall Archaeological Unit to undertake the archaeological work.

Although Planning and Listed Building Consent have not been sought for these works, there is an understanding that because of the significance of this heritage asset, the works will be monitored and overseen by Cornwall Council's Senior Development Officer, Historic Environment Planning (Peter Dudley).

John Harvey House, Hayle, Cornwall, Archaeological Watching Brief



Fig 1 Site Location (circled in red).

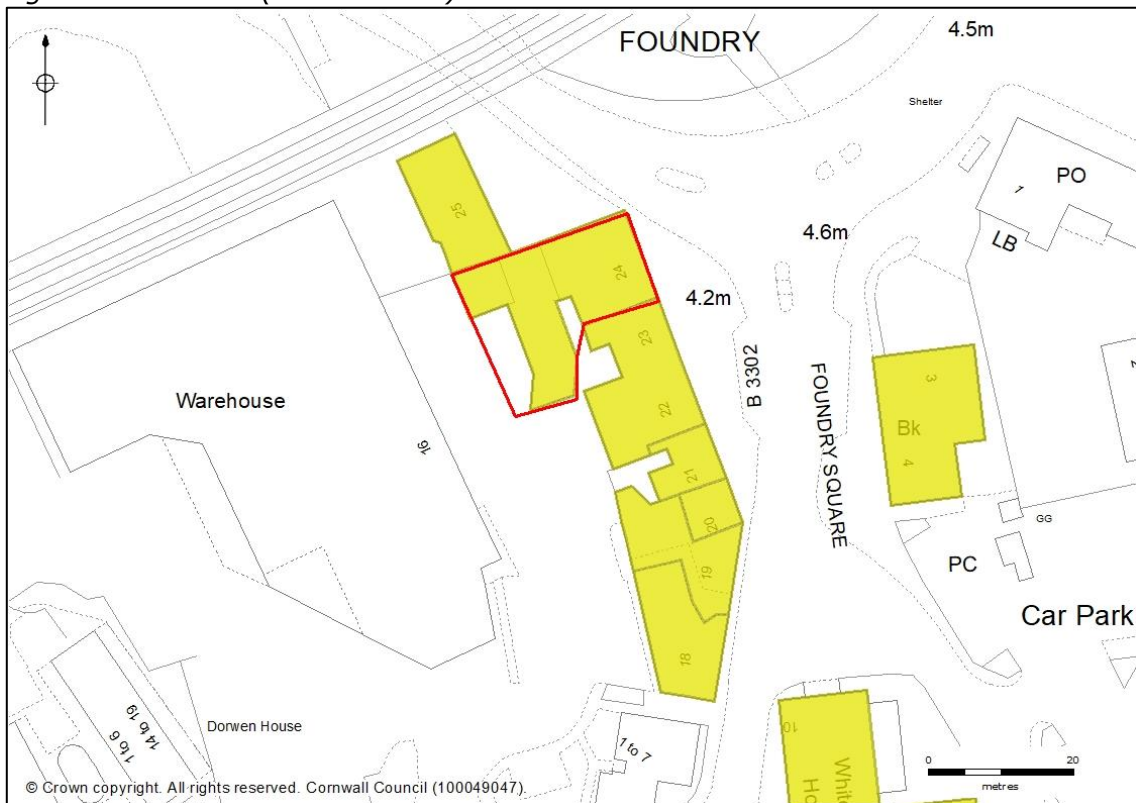


Fig 2 John Harvey House (outlined in red) Listed Buildings are shaded yellow.

John Harvey House, Hayle, Cornwall, Archaeological Watching Brief



Fig 3 Trial pits proposal plan of locations.

Project extent

There are ten trial pits which are located both inside and outside of the building. The approximate locations of each are shown on Figure 3. Trial pits 3, 8 and 10 are located inside the building.

Aims and objectives

The principal aim of the study is to gain a better understanding of the surviving archaeological at John Harvey House and to create a record of any archaeological features exposed during in the trial pits.

The objectives are to:

- Record all archaeological remains exposed at the site, including the collection of artefacts.

Research objectives are to:

- Ascertain the character, date and extent of any subsurface remains within the open pits.

Working methods

All recording work will be undertaken according to the Chartered Institute for Archaeologists (CIfA) guidance (CIfA 2014a; 2014b; 2014c; 2017). Staff will follow the CIfA *Code of Conduct* (2014d). The Chartered Institute for Archaeologists is the professional body for archaeologists working in the UK.

Pre-fieldwork

In advance of the fieldwork CAU, will discuss and agree with the client:

- Working methods and programme.
- Health and Safety issues and requirements.

Desk-based assessment

A rapid desk-based assessment will be carried out to inform the fieldwork stage. This will be guided by CIfA's guidance on undertaking desk-based assessment (CIfA 2017) and will comprise study of the following:

- Readily available published sources
- Historic maps, including
 - OS 1-inch survey (c1810),
 - Parish Tithe maps (c1840),
 - 1st and 2nd Editions of the OS 25-inch maps (c1880 and c1907)
- Modern maps
- GIS data accessible to CAU

Fieldwork: Archaeological recording

The SDOHE has advised that archaeological recording work is required on the site. This work will be guided by CIfA's guidance on undertaking watching briefs (CIfA 2014b).

Excavation of the trial pits was undertaken on the understanding that should any features such as surfaces or structures be encountered, they were to be left *in situ* until an archaeologist was present to record them.

Recording

During the archaeological recording the archaeologist will:

- Identify and record any archaeological features that are revealed; the level of recording will be appropriate to the character/importance of the archaeological remains.
- All trial pits will be accurately located on a site plan.
- A plan and a single section will be drawn for each of the trial pits unless further section drawings are required to complete the record.
- Site drawings (plans and sections) will be made by pencil (4H) on drafting film; all drawings will include standard information: site details, personnel, date, scale, north-point.
- All features and finds will be accurately located at an appropriate scale.
- All archaeological contexts will be described to a standard format linked to a continuous numbering sequence.
- Photographic recording will comprise colour photography using a digital SLR camera (with a resolution of 10 million pixels or higher; CAU will follow Historic England (2015) guidance on digital image capture and storage). Photographs will include a record of significant features and general working shots. A metric scale, site and context identifier, and a north arrow where appropriate, will be included in all record shots.

Treatment of finds

The fieldwork may produce artefactual material. The following recording and retention policies will be followed:

- In the event that objects containing precious metal(s) are encountered, the coroner will be informed as per the provisions of the Treasure Act 1996.
- Significant finds in stratified contexts will be plotted on a scaled base plan or with a Leica GPS unit and recorded as small finds.
- All finds will be collected in sealable plastic bags which will be labelled immediately with the site code, the context number or other identifier, the type of material, and the finder's initials. The only exception to this policy will be that large assemblages of modern (post-1800) material may be representatively sampled.
- Modern (post-1800) finds may be disposed of at the cataloguing stage. This process will be reviewed ahead of its implementation.

Treatment of samples

The fieldwork may produce environmental samples. The following collection, recording and processing policies will be followed:

- Sealed/undisturbed archaeological contexts in the form of buried soils, layers or deposits within significant archaeological features that have the potential to contain palaeoenvironmental evidence and/or material suitable for scientific dating will be sampled.
- Where bulk samples are taken a minimum of 40 litres will be sampled from these deposits where feasible.
- In the event that significant organic remains are encountered, advice may be sought from the Historic England Science Advisor (South West).
- All samples will be described to a standard format linked to a continuous numbering sequence.
- Bulk samples will be processed using flotation with appropriate mesh sizes.

Treatment of human remains

- If human remains are discovered within an archaeological context on the site the client, the SDOHE, and Public Health, Cornwall Council will be informed.
- Any human remains should only be excavated and removed if it is considered that they will contribute towards further scientific understanding.
- A coroner's license must be obtained from the Ministry of Justice before any remains are disturbed.
- Any consents or licenses required will be obtained on behalf of the client by CAU.
- If human remains are uncovered, which require excavation, they will be excavated with due reverence. The site will be adequately screened from public view. Once excavated, human remains must not be exposed to public view. If human remains are not to be removed their physical security will be ensured, by backfilling as soon as possible after recording.

Creation of the physical and digital archive

Following review with the CAU Project Manager the results from the fieldwork will be collated as an archive.

This will involve the following.

- All finds, etc., will be washed, catalogued, and stored in a proper manner (being clearly labelled and marked and stored according to CAU guidelines).
- All records (drawings, context sheets, photographs, etc.) will be ordered, catalogued and stored in an appropriate manner (according to CAU guidelines).
- Colour digital images taken as part of the site archive will be deposited with the Archaeology Data Service (ADS).
- Completion of the Historic England/ADS OASIS online archive index.

- All correspondence relating to the project, the project design, and a single paper copy of the report, stored in an archive standard (acid-free) documentation box.
- Drawn archive storage (plastic wallets for the annotated record drawings).
- Additional digital data (survey, external reports, etc)

Archive deposition

An index to the site archive will be created and the archive contents prepared for long term storage, in accordance with CAU standards.

- The project archive will be deposited initially at ReStore PLC, Liskeard and at CAU premises until a suitable repository is found.
- Digital data will be stored on the Cornwall Council network which is regularly and frequently backed up.
- Digital data (CAU reports, external reports, survey data, digital photographs, etc) forming part of the site archive will be deposited with the ADS.

CAU uses the following file formats for stored digital data:

| | |
|------------|---|
| DOCX | Word processed documents |
| XLSX | Spreadsheets |
| PDF | Exports of completed documents/reports/graphics |
| JPG | Site graphics and scanned information |
| DNG or TIF | Digital photographs |
| DWG | AutoCAD drawings, measured surveys |
| MXD | ArcView GIS (electronic mapping) data |
| AI | Adobe Illustrator graphics |

Reporting

The results from the project will be drawn together and presented in a report. The scope of the report will be dependent on the scale and significance of the results from the project.

The report will include the following elements:

- Summary
- Project background
- Aims and objectives
- Methodology
- Location and setting
- Brief site history
- Recording results
- Conclusions
- References
- Project archive index
- Supporting illustrations: location map, historic maps, plans, elevations, sections, photographs, photo direction plan for the historic building record
- The project design (this document) will be added to the archive report as the final appendix.

Timetable

The study is anticipated to commence during January 2022.

The archive report will be completed within 5 months of the end of the fieldwork. The deposition of the archive will be completed within 3 months of the completion of the archive report.

Availability of CAU staff for fieldwork will be dependent on Covid 19 restrictions, which could cause delays. A Covid Risk Assessment will be carried out (if required) prior to any onsite work by CAU staff or employees.

Monitoring and Signing Off Condition

Monitoring of the project will be carried out by the SDOHE.

- The SDOHE will monitor the work and should be kept regularly informed of progress.
- Notification of the start of work shall be given preferably in writing to the SDOHE at least one week in advance of its commencement.
- Any variations to the project design will be agreed with the SDOHE, in writing, prior to them being carried out.
- If significant detail is discovered, all works must cease, and a meeting convened with the client and the SDOHE to discuss the most appropriate way forward.

Monitoring points during the study will include:

- Approval of the project design
- Completion of archaeological recording
- Completion of archive report
- Deposition of the archive

References

CIfA, 2014. *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*, CIfA, Reading

CIfA, 2014a. *Standard and guidance for archaeological field evaluation*, CIfA, Reading

CIfA, 2014b. *Standard and guidance for an archaeological watching brief*, CIfA, Reading

CIfA, 2014c. *Standard and guidance for archaeological excavation*, CIfA, Reading

CIfA, 2014d. *Code of Conduct*, CIfA, Reading

CIfA, 2017. *Standard and guidance for historic environment desk-based assessment*, CIfA, Reading

Historic England 2016. *Understanding Historic Buildings: A guide to good recording practice*. Historic England, Swindon

Historic England 2015. *Guidance note on Digital Image Capture and File Storage*. Historic England, Swindon

https://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=1143685&resourceID=5

Cornwall Archaeological Unit

Cornwall Archaeological Unit is part of Cornwall Council. CAU employs 12 project staff with a broad range of expertise, undertaking around 120 projects each year.

CAU is committed to conserving and enhancing the distinctiveness of the historic environment and heritage of Cornwall and the Isles of Scilly by providing clients with a number of services including:

- Conservation works to sites and monuments
- Conservation surveys and management plans
- Historic landscape characterisation
- Town surveys for conservation and regeneration
- Historic building surveys and analysis
- Heritage Impact Assessments/Heritage Statements
- Maritime and coastal zone assessments
- Air photo mapping

- Excavations and watching briefs
- Assessments and evaluations
- Post-excavation analysis and publication
- Outreach: exhibitions, publication, presentations

Standards



CAU is a Registered Organisation with the Chartered Institute for Archaeologists and follows their Standards and Code of Conduct.

<http://www.archaeologists.net/codes/ifa>

Terms and conditions

Contract

CAU is part of Cornwall Council. If accepted, the contract for this work will be between the client and Cornwall Council.

The views and recommendations expressed will be those of CAU and will be presented in good faith on the basis of professional judgement and on information currently available.

Project staff

The project will be managed by Jo Sturgess who will:

- Discuss and agree the objectives and programme of each stage of the project with the client, the SDOHE and other field officers, including arrangements for health and safety.
- Monitor progress and results for each stage.
- Liaise with the client, the SDOHE regarding related issues.

Work will be carried out by CAU field staff. All staff will follow CAU's Health and Safety Policy and work in accordance with a site-specific risk assessment.

The project team is expected to include:

Jo Sturgess BA, MCIfA

Senior Archaeologist at CAU with a wide range of experience in recording historic buildings, landscapes, excavation, post-excavation and characterisation. Past historic building works have included Lanhydrock House (Cornwall), Port Eliot (Cornwall), Arlington Court (Devon), Bradley Manor (Devon), Buckland Abbey (Devon), Cutmadoc Farmhouse (Cornwall), the Piggery and Cider House at Godolphin (Cornwall), Poltesco Mill House (Cornwall), Molenick Farmhouse (Tideford), City Wharf (Truro), Harvey's Foundry (Hayle), Boswednack Serpentine works; Porthmeor farm; Bartle's Foundry (Pool), Manor Tannery (Grampound) Duchy Palace (Lostwithiel) and variety of mine buildings, farm buildings and industrial buildings. Other projects include Devon Extensive Urban Survey, Gwithian's past excavations, Lemon Quay excavation, Goonhilly Earth Station survey, Lower Boscaswell and Trevesa in West Penwith landscape surveys. Expertise includes use of Total Station, CAD software and GIS. Holder of a CSCS card and qualified first aider.

Antony Angove, BSc (Hons), MA, ACIfA

Assistant Archaeologist at CAU who joined the team in February 2019 after completing his degree. He has experience in undertaking heritage impact assessments, measured surveys, watching briefs, evaluations, excavations and building surveys as a sole worker or member of team.

Proficient archaeological investigation skills, site supervisory experience, GIS, Leica GPS /GNSS user, Total Station and CAT Scan user. Holder of a CSCS card.

Report distribution

A digital copy of the report will be sent to the client. A paper copy can be supplied on request.

Once verified by Cornwall HER, a digital copy of the report will also be publicly available online via the Archaeology Data Service (ADS) Library.

Copyright

Copyright of this Written Scheme of Investigation will be reserved to Cornwall Archaeological Unit, Cornwall Council. It may only be used/reproduced with permission from Cornwall Archaeological Unit.

Existing copyrights of external sources will be acknowledged where required.

Freedom of Information Act

As Cornwall Council is a public authority it is subject to the terms of the Freedom of Information Act 2000, which came into effect from 1st January 2005.

CAU will ensure that all information arising from the project shall be held in strict confidence to the extent permitted under the Act. However, the Act permits information to be released under a public right of access (a "Request"). If such a Request is received CAU may need to disclose any information it holds, unless it is excluded from disclosure under the Act.

Health and safety statement

CAU follows Cornwall Council's *Statement of Safety Policy*.

Prior to carrying out on-site work CAU will carry out a site-specific Risk Assessment tailored to follow Covid-19 restrictions.

Insurance

CAU is covered by Cornwall Council's Public and Employers Liability Insurance, with a policy value of £50m. The Council also has Professional Negligence insurance with a policy value of £10m.

Jo Sturgess

Senior Archaeologist

17/01/2022

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