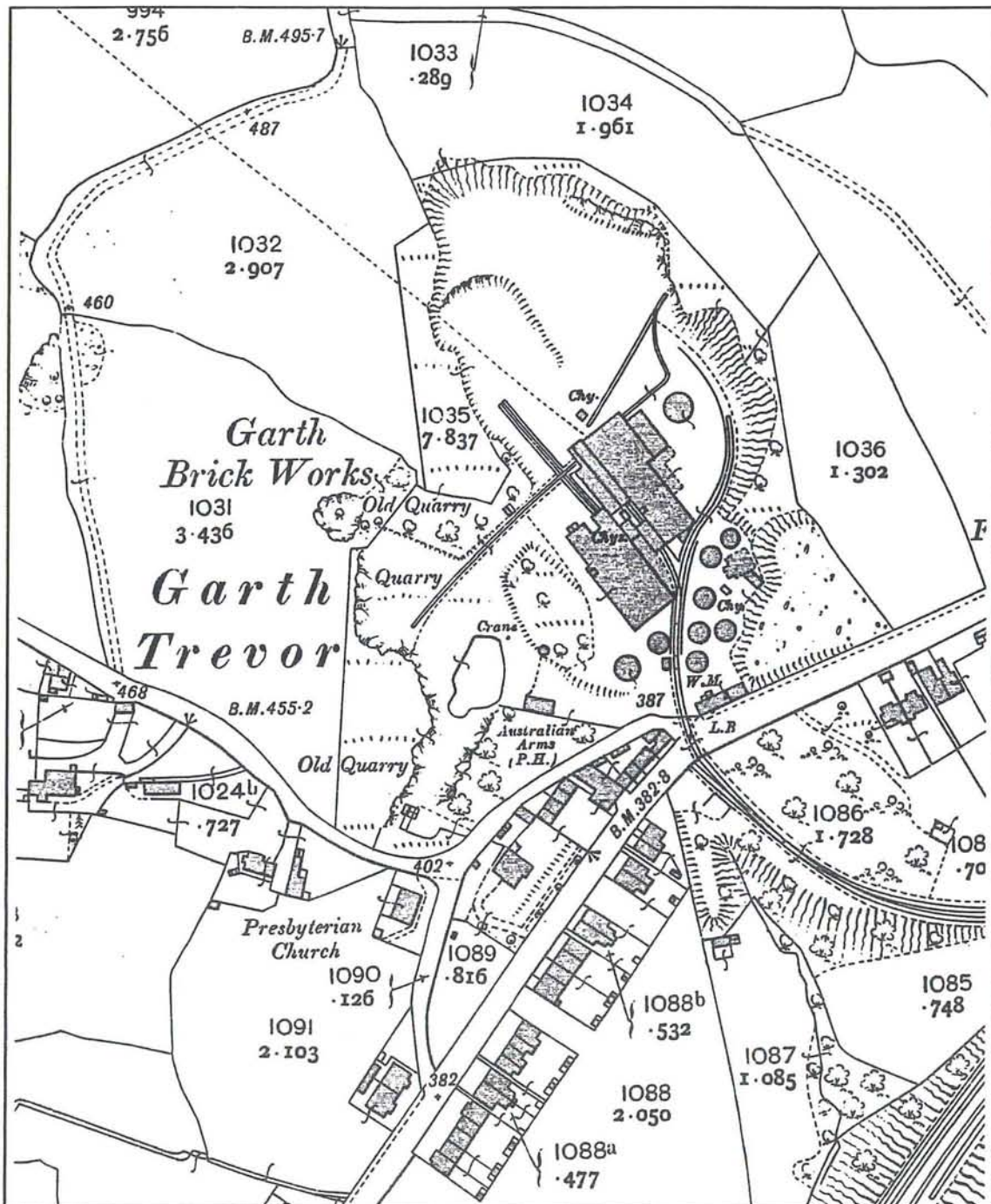


Garth Brickworks, Trevor, Wrexham

ARCHAEOLOGICAL WATCHING BRIEF



CPAT Report No 680

Garth Brickworks, Trevor, Wrexham

ARCHAEOLOGICAL WATCHING BRIEF

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December 2004

Report for Watkin Jones Homes

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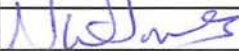

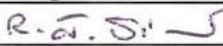
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Appendix 1: Site Archive

1 INTRODUCTION

- 1.1 In December 2004, the Field Services section of The Clwyd-Powys Archaeological Trust (CPAT) were invited to undertake a programme of archaeological recording in advance of the development of the former Australia Brickworks, Garth Road, Trevor, Wrexham County Borough.
- 1.2 The archaeological works were the subject of a planning condition imposed on the advice of the regional archaeological curator, the Clwyd-Powys Archaeological Trust, following which the developer, Watkin Jones Homes, approached Wrexham Archaeology Service to prepare an archaeological brief that would give guidance on the form of the required works.

2 LOCATION & BACKGROUND

- 2.1 The site of the former brickworks is centred at SJ 26514254, occupying an area of around 3.5ha to the north-west of the A539, west of Trevor (fig. 1).
- 2.2 The history of the brickworks has already been studied in some detail by Andrew Connolly and most of the following account (paras 2.2-2.5) is drawn from his work (Connolly 2003, 266-269). The original brickworks dates from sometime between 1858, when the site is shown as farmland on a map associated with the development of the railway, and 1862 when the first documentary record appears following a court case. The case in question relates to a dispute between Mr Moses Evans of the nearby Australia Arms, who had rented the brickworks from a Mr Whalley, and John Wright, who forcibly evicted him from the site. It seems that Mr Wright may have been the first to establish the brickworks but had been replaced by Mr Evans, possibly as a result of the former's non-payment of rent.
- 2.3 A map of 1864 showing the proposed Garth Mineral Railway depicts the brickyard with a single kiln near the road, behind which was a clay bank and a brickshed. Two years later the site, now known as the Australia Brickworks, Trevor, was offered for letting following the bankruptcy of Mr Evans. By 1868 the owners of a nearby stone quarry, Jonathan and Thomas Roberts, had taken over the works, although in 1870 the business changed hands again, this time passing to Charles Mason, who later entered into partnership with Anthony Shelmerdine. The Ordnance Survey 1:2,500 map of 1875 (fig. 2) gives some indication of the extent of the brickworks during this period. As with previous enterprises, this was relatively unprofitable and in 1880 the Trevor Fireclay Works and Colliery, as it was then known, held an auction of stock and the following year Mr Mason retired from the business, leaving Shelmerdine to continue until 1882 when the company went bankrupt.
- 2.4 By 1885, and possibly earlier, the works were operated by Messrs Roberts and Maginnis, who appear to have been the first successful operators. The Ordnance Survey 1:2,500 map of 1899 (fig. 3) shows how much the brickworks had expanded since 1875. By 1914 the company had ceased production of building bricks in favour of silica bricks for the steel industry, as well as a plastic cement known as 'gannister' which was used to mould the channels for molten iron in the steel industry. This was manufactured from a mixture of water, silica, sandstone, broken silica bricks and fireclay, the latter being brought in from Shropshire. The silica was mined from two sources, a mine in the nearby hills from where it was transported by horse and cart, and in the early 20th century by an aerial ropeway (see fig. 4), and a drift mine immediately behind the works. The use of donkeys to haul the silica from the mine earned the works the local nickname of The Donkey Works. From the 1930s silica was also brought in from Minera and elsewhere. By 1922 the company was known as the Welsh Silica Brick and Gannister Works.
- 2.5 During the 1960s the kilns were converted to oil firing and the transportation of materials and products changed from rail to road. The Ordnance Survey 1:2,500 map of 1963 (fig. 5) gives an indication of the extent and layout of the brickworks during its later years. The works eventually closed in 1979 due to a general recession in the steel industry. The steam engine,

which was purchased second hand in the 1920s, and provided electricity for the crushers and mills, was dismantled and re-erected at the Blist's Hill Museum in Ironbridge.

3 WATCHING BRIEF

- 3.1 Following the closure of the works in 1979 the majority of the site was levelled, leaving only the offices and a few other buildings close to the road, together with several minor structures and parts of the north-western end of the main complex. Much of the site became densely overgrown, and the removal of the vegetation and general site clearance associated with the present project afforded an opportunity for archaeological recording prior to the demolition of the surviving buildings. The recording was undertaken on 8 and 10 December 2004.

Structure 1 - Office

- 3.2 The brickworks office was located along the streetfrontage, to the east of the site entrance. There appear to be three main phases to the building, which is constructed in red brick with an asbestos roof. Originally appearing as two separate buildings, a central section was later constructed, possibly at the same time that an extension was added to the north-western end. The eastern part (6.6 x 5.0m) is single-storey with access via steps on the north-west corner and a side entrance on the south-east. There is a small concrete-roofed lean-to on the eastern side. The western part (7.2 x 4.5m) is two-storey, originally rectangular in plan and divided into two rooms, the western room having a door at the west end, which was later blocked, and a small fireplace and external chimney. An extension (5.0 x 2.8m), which removed the northern wall, has doors at the east and west ends. The central section (6.5 x 4.3m), like the extension, is in more modern red brick, and of two storeys with a simple, open rectangular plan.

Structure 2 - Weighbridge

- 3.3 The Ordnance Survey map of 1912 (fig. 4) depicts a weighbridge along the brickworks railway, close to the entrance. A small red-brick building (3.5 x 2.6m) with a flat concrete roof survives at the northern end of a range of sheds and is likely to be associated with the weighbridge. A short section of the railway is visible close by.

Structure 3

- 3.4 A range of open-sided sheds of steel girder and corrugate construction lie to the west of the entrance, still containing stacks of bricks on wooden palettes. The western shed has a low stone and brick retaining wall along its rear, southern side, and an area of concrete hard-standing to the north which, through comparison with the Ordnance Survey map of 1963 (fig. 5), appears to indicate a further covered area.

Structure 4 - Toilets

- 3.5 A small toilet block of red brick construction lies between the sheds and the road.

Structure 5

- 3.6 To the west of the sheds are the remains of a two-storey building of random stone construction, only the eastern gable (4.8m wide) and part of the southern wall of which survive. The building is depicted on the Ordnance Survey map of 1912 (fig. 4).

Structure 6

- 3.7 Between structure 5 and the disused quarry, now flooded, are the basal remains of another building (9.8 x 4.8m), consisting only of red brick foundations and a tiled floor.

Structure 7

- 3.8 Two circular concrete bases, each 1.5m in diameter, stand on a rectangle of concrete. They do not appear on the Ordnance Survey map of 1963 (fig. 5) and their appearance suggests that they may be bases for storage containers, possibly for oil, once the kilns were converted to that fuel.

Structure 8 - Crusher

- 3.9 The shell of an open-fronted structure of block and concrete construction (10.8 x 5.6m) lies on the south-eastern side of an embankment. Concrete bases within the structure would have held crushing machinery, stone being loaded into the top from the embankment. The structure post-dates the Ordnance Survey map of 1963 (fig. 5).

Structure 9

- 3.10 A short length of revetment wall was revealed, at least 8m in length and of random rubble construction, 1.6m high and 0.5m thick. The wall has a slight batter to the south side and concrete coping.

Structure 10

- 3.11 Towards the north-western side of the area is a small red-brick structure (5.2 x 3.3m) with a flat concrete roof, internal central division and double-doored front. The concrete floor has several exposed ducts.

Structure 11

- 3.12 To the east of the office is a red-brick wall which formed the eastern end of a building 4.8m wide.

Structure 12

- 3.13 Towards the south-eastern corner of the site is a concrete revetment wall, 5.9m long and 1.8m high, on top of which are two steel girders.

Structure 13

- 3.14 At the base of a steep slope along the eastern side of the site is a concrete revetment wall alongside which are the basal remains of a building 16.5m long and 7.0m wide, which corresponds to a structure depicted on the Ordnance Survey map of 1963 (fig. 5).

Structure 14

- 3.15 The basal remains of a rectangular building measuring 21 x 6m, of block and concrete construction, survive along the eastern side of the site, corresponding to a structure depicted on the Ordnance Survey map of 1963 (fig. 5).

Structure 15 - Chimney

- 3.16 To the west of structure 14 is the base of a red-brick chimney, 2.2m square and 1.4m high, with an arched flue on the northern side.

Structure 16 - Brickworks complex

- 3.17 During its later years the main brickworks complex comprised an extensive range of buildings to either side of a railway siding which appears to have run right through the works. The eastern part included the access to the drift mine (fig. 5), and had previously included the terminus for the aerial ropeway (fig. 4). The northern end of the building survives in part, although largely buried beneath a large mound of demolition rubble. The visible remains include three large concrete bases, the most northerly of which is considerably higher than the rest of the complex and may be associated with the aerial ropeway.

Structure 17 - Brickworks complex

- 3.18 The western part of the main complex is rather better preserved, with red-brick walling standing to over 3m in height. A number of machine bases survive, including an unusual octagonal concrete base to the west of the main building. Along the eastern side of the building is a substantial concrete base beside which the railway siding was formerly located.

Other features

- 3.19 The earthwork remains of a possible mine level are located on the eastern side of the site, comprising a linear hollow 2.5m wide flanked by spoil, which extends for 10m from the exposed quarry face. Three open mine levels or adits are visible part way up the quarry face towards the northeastern corner of the site. It would appear that at least one is still used by members of a local caving club to access an extensive system of underground workings.

- 3.20 The brickworks complex lies within an area of former quarrying and clay extraction, with the steep quarry face forming the site boundary on all but the southern side. An area of deeper workings is now flooded, forming a pool towards the south-west corner of the site, while a second pool to the north of the main complex is located on the site of the entrance to the drift mine.

4 CONCLUSIONS

- 4.1 The programme of recording has enabled the preservation by record of the surviving structures prior to their demolition as part of the new housing development. Although the history of the brickworks is relatively well documented a number of previously unrecorded structures were identified which belong to the later period of the brickworks during the 1960s and 1970s, including the remains of a structure which housed stone crushing machinery.

5 REFERENCES

Connolly, A, 2003. *Life in the Victorian brickyards of Flintshire and Denbighshire*. Llanrwst: Gwasg Carreg Gwalch.

APPENDIX 1

SITE ARCHIVE

The site archive comprises the following items which are retained in the general archives of the Clwyd-Powys Archaeological Trust at 7a Church Street in Welshpool, Powys:

4 site record forms, including scale plans of main structures
42 digital photographs
Photograph register

Digital data

AutoCAD13 drawing 1241plan.dwg is a composite plan, based on the clients land survey and augmented by hand measured survey. Drawing of individual structures include the following:

crusher.dwg	stone crusher, structure 8
office.dwg	office buildings, structure 1
shed1.dwg	northern part of structure 3
shed2.dwg	southern part of structure 3
works.dwg	main complex, structures 16 and 17

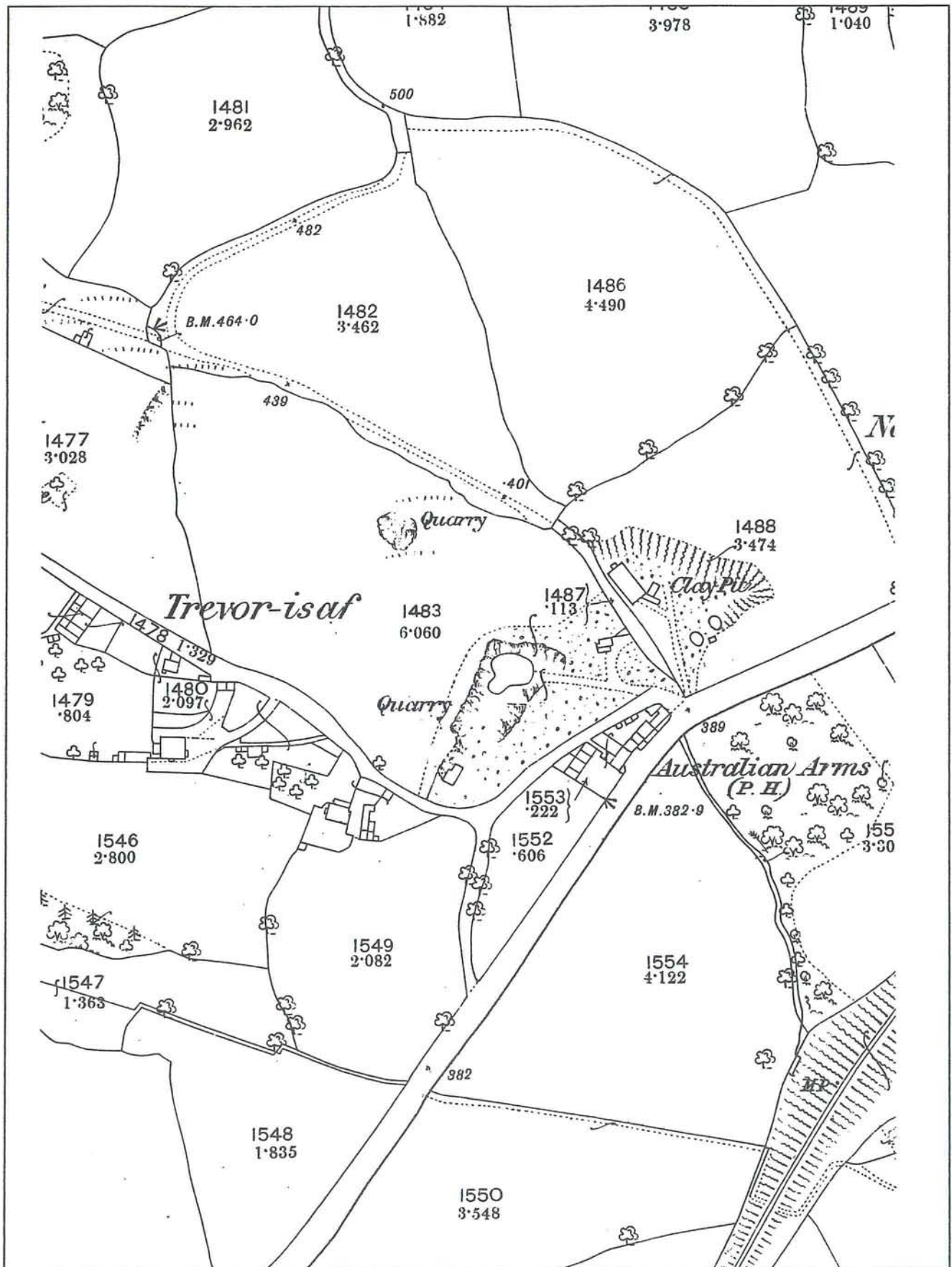


Fig 2. Ordnance Survey 1:2,500 1st edition map of 1875 (Denbs 35.13)

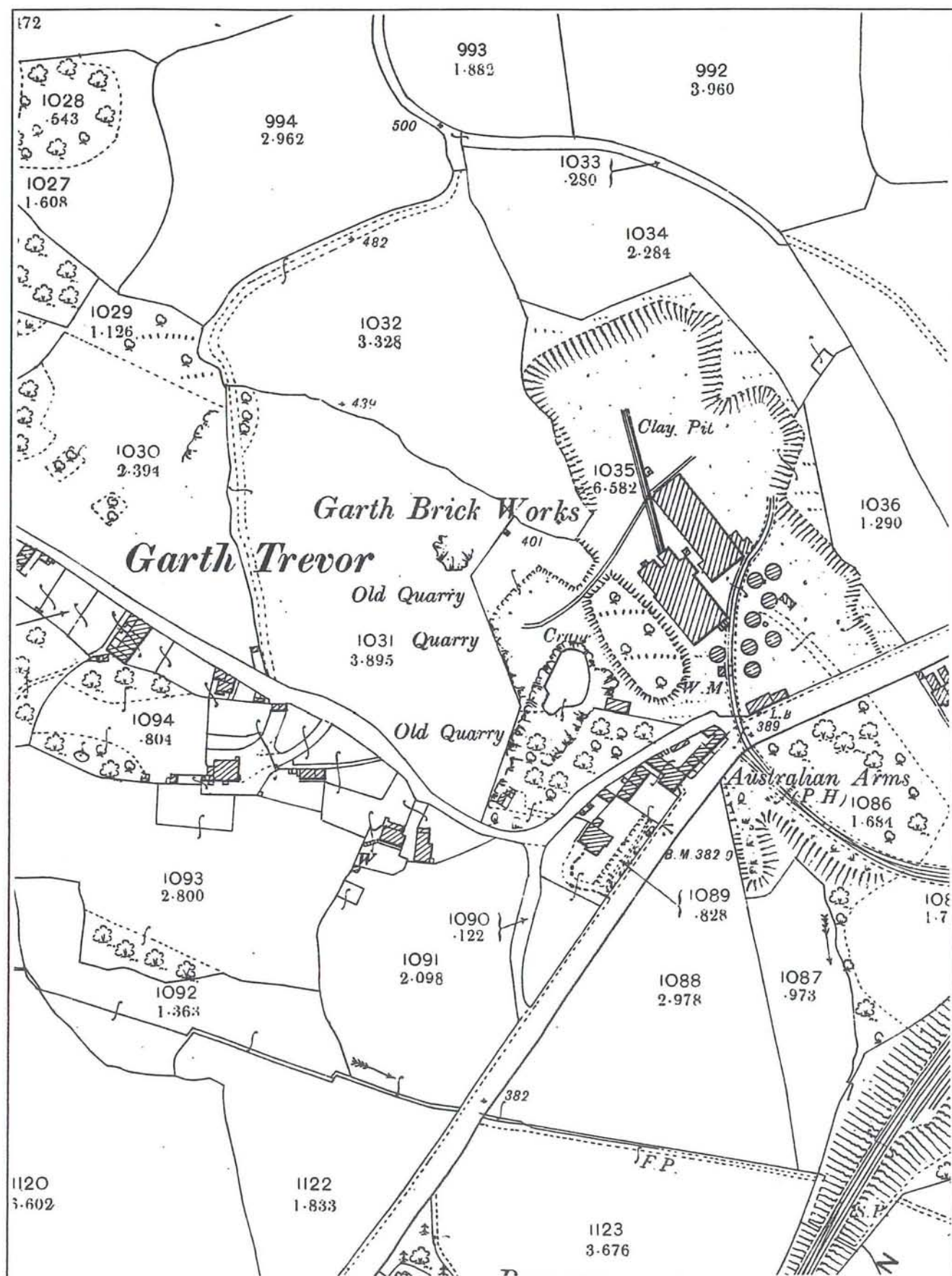


Fig 3. Ordnance Survey 1:2,500 2nd edition map of 1899 (Denbs 35.13)

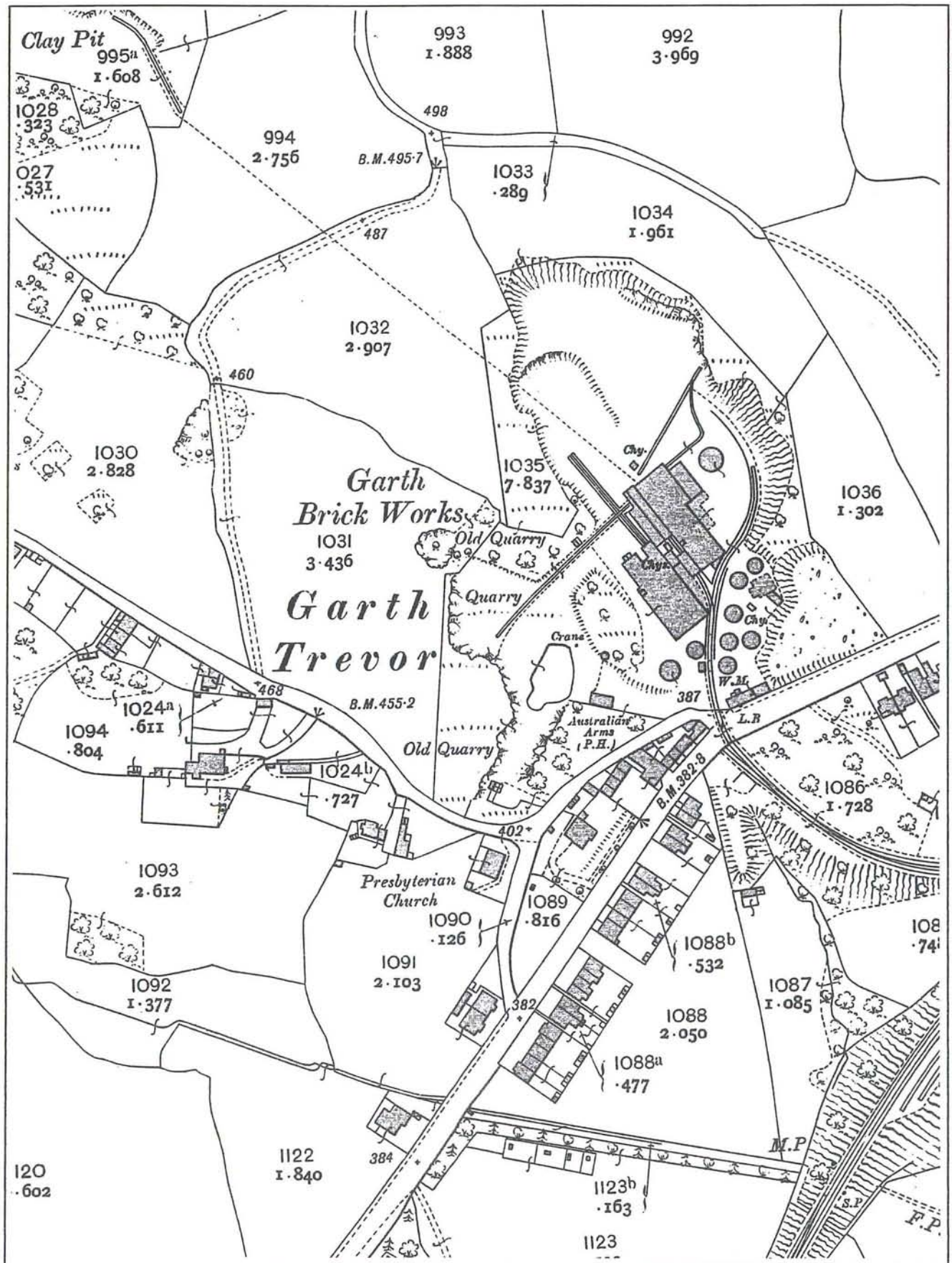


Fig 4. Ordnance Survey 1:2,500 3rd edition map of 1912 (Denbs 35.13)

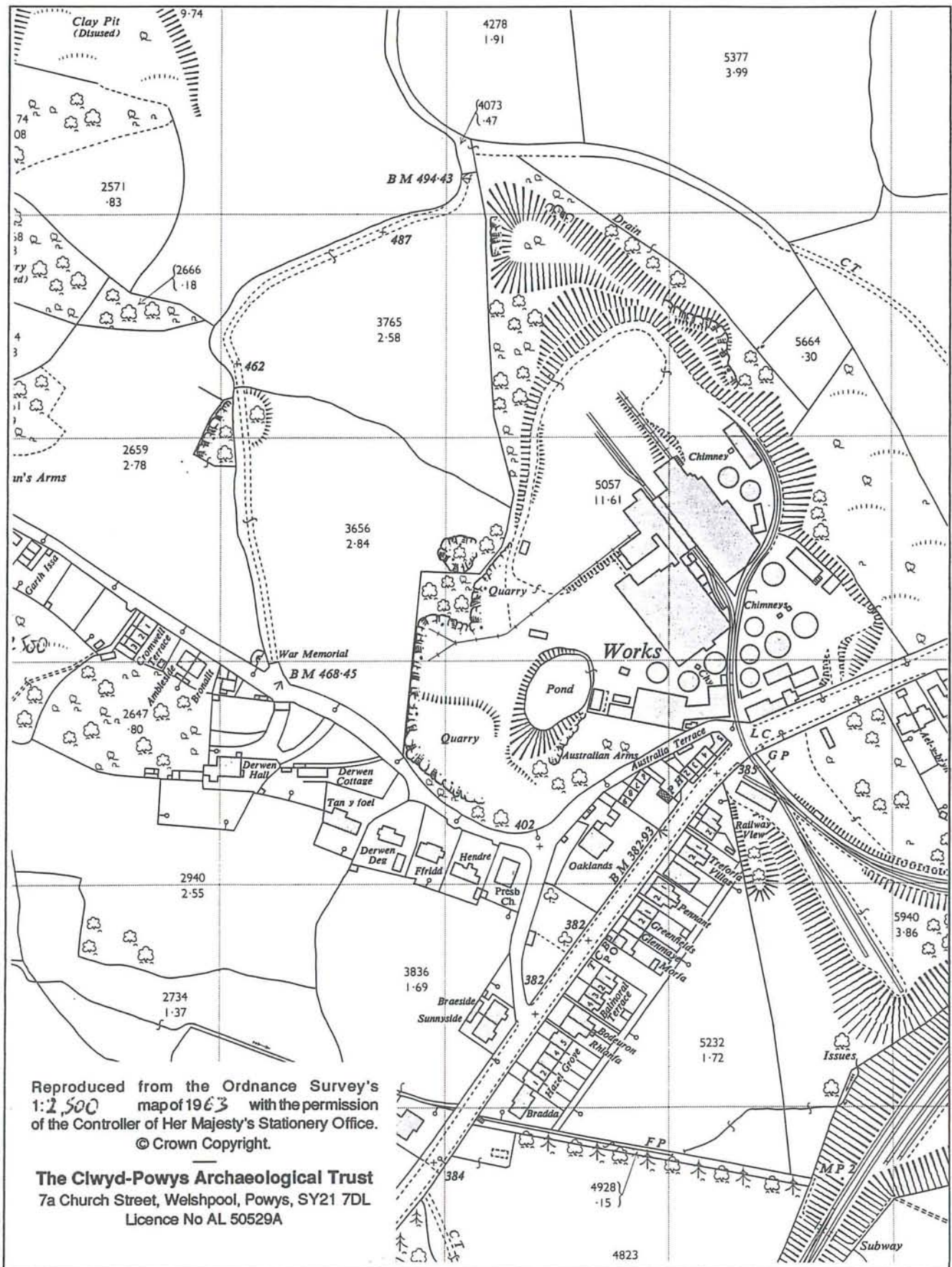


Fig 5. Ordnance Survey 1:2,500 map of 1963



Fig. 6 Garth Brickworks - visible remains, December 2004, scale 1:1,000



Plate 1 Brickworks office buildings, structure 1. Photo CPAT 1819.02



Plate 2 Structures 2 and 3. Photo CPAT 1819.06



Plate 3 structure 5. Photo CPAT 1819.11



Plate 4 Stone crusher, structure 8. Photo CPAT 1819.15



Plate 5 Structure 10. Photo CPAT 1819.17



Plate 6 Chimney base, structure 15. Photo CPAT 1819.33



Plate 7 Brickworks complex east, structure 16. Photo CPAT 1819.35



Plate 8 Brickworks complex west, structure 17. Photo CPAT 1819.38