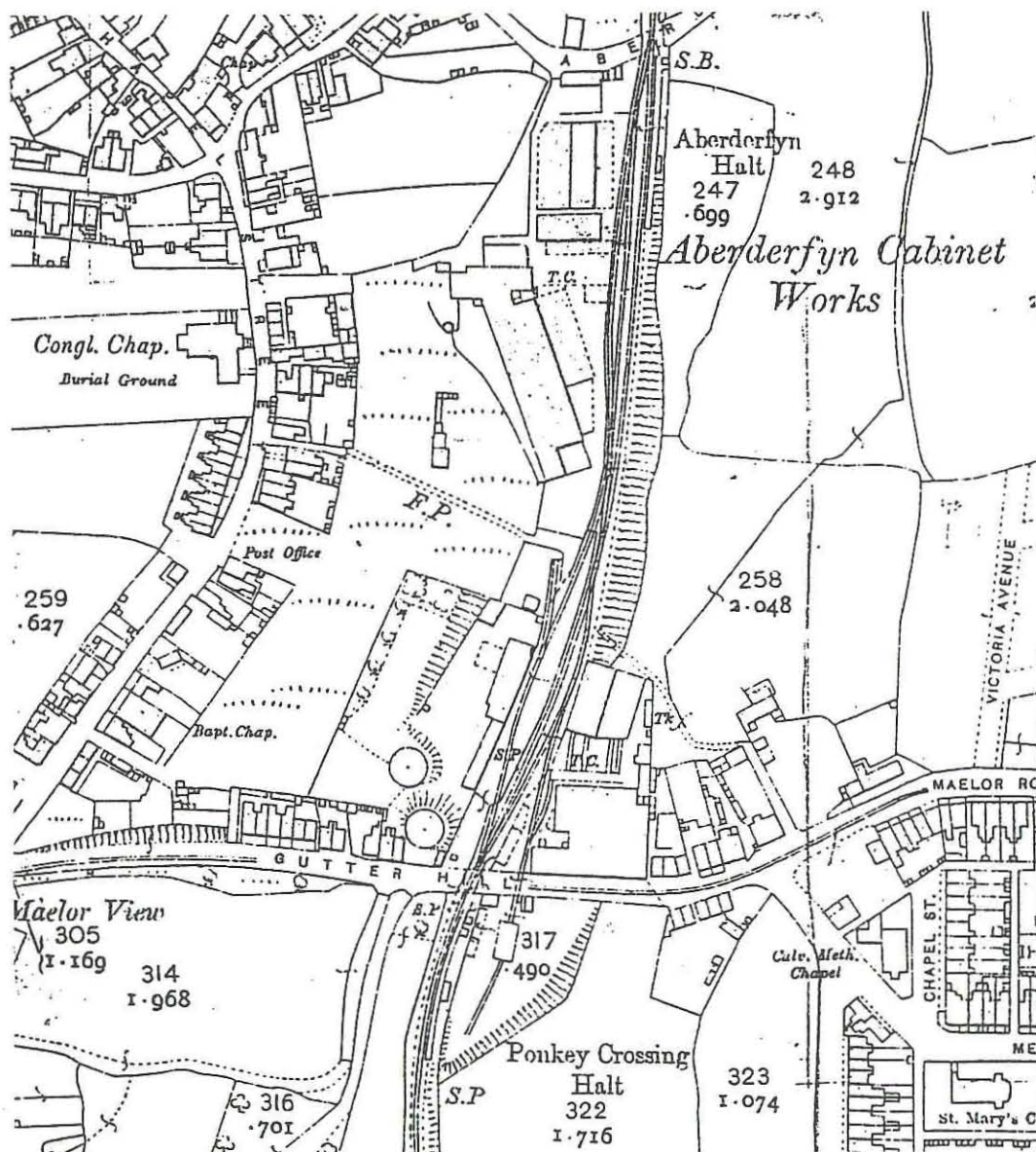


*The Former Gas Works, Johnstown,
Wrexham Maelor*

ARCHAEOLOGICAL DESK-TOP STUDY AND WATCHING BRIEF



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ARCHAEOLOGICAL DESK-TOP STUDY AND WATCHING BRIEF

W.G. Owen and R. Hankinson
September 1997

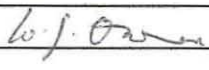
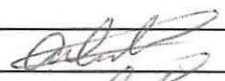
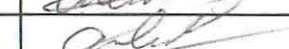
Report for David A. Griffiths Partnership.

CPAT Report Record

Report and status

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CPAT Project Name	Johnstown Gas Works		
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1 INTRODUCTION

- 1.1 The Contracts Section of the Clwyd Powys Archaeological Trust (hereafter CPAT) was commissioned in October 1996 by the David A. Griffiths Partnership to carry out a watching brief during the course of development work at the site of the former gasworks, Gutter Hill, Johnstown, Clwyd. This was in accordance with the conditions specified by the Wrexham County Borough Council in granting planning permission for the construction of a light industrial unit at the site (Application No. CB00346).
- 1.2 A brief for the archaeological fieldwork required had been prepared for the David A. Griffiths Partnership by the Wrexham Archaeology Service which formed the basis of a detailed project design prepared for the Partnership by CPAT and which was subsequently approved by the Archaeological Officer of the Wrexham Archaeology Service.

2 LOCATION, DESCRIPTION AND GEOLOGY (SJ 2984 4642; 137m OD; Fig. 1)

- 2.1 The development area lies in Johnstown immediately to the north of the B5426 Johnstown-Rhosllanerchrugog road on what was formerly the site of the Gutter Hill gas works. It covers an area of approximately 0.26ha. It is bounded on the south by a fire station, with an access road alongside leading to the site. To the east is a disused industrial area formerly occupied by Watkin Jones & Son, Builders and which was acquired by Wrexham Maelor District Council in 1996. To the north, the area is bounded by a footpath known as Furnace Bank, whilst to the west it is bounded by a sloping wooded area. The northern half of the site is approximately 0.3m higher than the southern half.
- 2.2 The underlying geology of the site consists of glacial drift which covers Ruabon Marl and Coal Measures of the later Carboniferous period (Smith 1961).

3 DESK-TOP STUDY

- 3.1 The desk-top study involved the examination of readily available documentary and cartographic sources at the following repositories: County Record Office, Hawarden (CROH); The National Library of Wales (NLW), Aberystwyth; The National Monument Record (NMR), RCAHMW, Aberystwyth; The Regional Sites and Monuments Record (SMR), CPAT, Welshpool.
- 3.1 Documentary and cartographic sources indicate that the development area has been the site of two phases of industrial activity the first of which dates back to the early nineteenth century when, in 1807, Thomas Jones of Llanerchrugog Hall established the Ponkey Ironworks (Lerry 1968). It is likely that it was positioned there in order to take advantage of the shallow coal and iron seams of the area known as Ponciau Banks to the west (Slater 1997). Prior to 1807, there is no direct evidence that the area was utilised for industrial purposes and a map of 1804 shows the area as being undeveloped (CROH D/E/643).
- 3.2 The position of the ironworks is shown on maps and plans subsequent to 1807. A map of 1826 shows that it formed a part of the estate of Frederick West (D/DM/162/3) together with the Aberderwen Furnaces to the north and also Ruabon Old Furnace. It is also shown on plans of 1945 (CROH/D/DM/162/7), 1850 (DD/HB/578; Fig. 4), 1853 (CROH/DD/HB/574) and is depicted on the plan of the Minera Lead Mining District and the Brymbo and Ruabon Coalfield drawn by Brenton Symmons in 1865 (Fig. 5). The 1:2500 Ordnance Survey map sheet of 1873, however, shows the land as being unoccupied apart from an old limekiln.
- 3.3 By 1899, the date of publication of the Ordnance Survey 2nd Edition 1:2500 (25") map sheet (Fig 6), the second phase of industrial activity, namely the gas works, had been established on the site. It is again shown on the 1:2,500 Ordnance Survey map sheet of 1912 and on the 1:10560 Ordnance Survey map published in 1963. The 1974 Ordnance Survey 1:2500 map sheet (Fig. 7), however, shows that it had been demolished and replaced by a single gasholder at the northern end of the site which remained there until demolished recently.

4 THE WATCHING BRIEF (Figs 2 and 3)

- 4.1 The watching brief was carried out on May 6, 1997. It had been intended that the ground disturbance which was involved prior to the construction phase of the project would be the subject of the watching brief, however, on arrival on site after receiving notification from the site contractors, it was apparent that much of the earthmoving had already been completed leaving a limited time for the recording of any features which had been revealed.
- 4.2 Earthmoving operations took the form of the excavation of the present ground surface material from an area measuring 17.0m north-north-east/south-south-west x 18.8m, to a depth of c.1m (Fig. 2). Cleaning of the surface of the northern part of the excavated area revealed a structural base measuring 5.9m west-north-west/east-south-east x 2.1m overall.
- 4.3 The structural base (Fig. 3) had been built of coursed brick walling, probably on a slightly wider brick plinth. At the western end of the surviving brickwork was a circular hollow representing the location of a former stantion; the remains of the stantion appeared to have been removed during machining and consisted of a circular cross-section iron or steel tube, 0.57m in diameter, sealed at one end, which had apparently been truncated by oxy-acetylene cutting in the past. The wall aligned north-north-east/south-south-west at the eastern end of the structural base was not directly bonded to the rest of the walling, but appeared to have been related; its northern end continued into the section at the north-north-eastern end of the excavated area.
- 4.4 The remainder of the excavated area appeared to be entirely occupied by disturbed material, rubble, waste, etc. It seems likely that this relates to the demolition of the gasworks which occupied the site prior to 1974.
- 4.5 Upon completion of the cleaning and drawing of the structural base, the site was rapidly covered by gravel and rolled to provide firm foundations for building construction.

5 CONCLUSIONS

- 5.1 The structural base, revealed by machining at the north-north-eastern end of the site, provided the only evidence of previous buildings on the site. The remainder of the excavated area appeared to be occupied by demolition rubble, most likely to relate to the former gasworks.
- 5.2 The precise nature and dating of the structural base have not been confirmed. However, the oxy-acetylene cut on the tubular stantion which appeared to have rested on the western end of the brickwork suggests that it may relate to the final phase of the gasworks which has been recently demolished.
- 5.3 The fact that the surface material had already been removed from the site prior to arrival may well have meant that some archaeological evidence which was present has been lost, although this is most probably limited to disturbance of the upper levels of the structural base and the remains of the tubular stantion.
- 5.4 No evidence relating to the earlier phases of industrial activity on the site, as revealed by the desk-top study, was encountered during the watching brief. Evidence for these earlier phases may survive beneath the area excavated during the watching brief, or could have been destroyed by the subsequent industrial use of the site.

6 ACKNOWLEDGEMENTS

- 6.1 The writers would like to thank the staff of the County Record Office, Hawarden; The National Library of Wales, Aberystwyth; The National Monument Record, RCAHMW, Aberystwyth; The Regional Sites and Monuments Record, CPAT, Welshpool; and Mr Bill Slater of Wrexham Archaeology Service for their help and assistance with the desk-top study.

7 REFERENCES

7.1 Documentary Sources

Lerry, G.G., 1968. *Collieries of Denbighshire*. Wrexham: Wynn Williams Ltd.

Slater, W.D., 1997. *Archaeological Assessment of land at Aberderfyn, Johnstown, Wrexham*. Wrexham: Wrexham Archaeology Service.

Smith, B., & George, T.N., 1961. *British Regional Geology - North Wales*. London: HMSO.

7.2 Cartographic Sources

CROH/D/E/643 (1804) Map showing coal pit, land and houses in Rhos.

CROH/D/DM/162/3 (1826) Part of Estate of Hon. Frederick West in Parish of Ruabon.

CROH/D/DM/162/7 (1845) Ponkey Yard Coal Plan belonging to Jones Burton Co.

CROH/DD/HB/578 (1850) Plan from a Lease showing Ponkey Furnace and Ponkey Estate.

CROH/DD/HB/574 (1853) Plan from a Transfer document showing Ponkey Furnace.

Plan of Minera Lead Mining District and the Brymbo and Ruabon Coalfield, Brenton Symmons (1865).

First Edition 25" Ordnance Survey Sheet : Denbighshire XXXV NE : 1874.

Second Edition 25" Ordnance Survey Sheet : Denbighshire XXXV NE : 1899.

Third Edition 25" Ordnance Survey Sheet : Denbighshire XXXV NE : 1912.

Third Edition 1:10,560 Ordnance Survey Sheet : Denbighshire SJ 24 NE : 1963.

Third Edition 25" Ordnance Survey Sheet : Denbighshire SJ 24 NE : 1974.

APPENDIX 1

ARCHAEOLOGICAL FIELDWORK AT THE FORMER GAS WORKS, GUTTER HILL, JOHNSTOWN, WREXHAM.

SPECIFICATION FOR AN ARCHAEOLOGICAL DESK-TOP ASSESSMENT AND WATCHING BRIEF BY CLWYD-POWYS ARCHAEOLOGICAL TRUST

1 Introduction

- 1.1 The proposed development of a block of land at the former Gas Works at Gutter Hill, Johnstown, Near Wrexham (hereafter the site) involves the construction of a light industrial unit on the site of the former gas works.
- 1.2 This area lies on part of the site of the former Ponciau Ironworks which date from 1825-65 and on the site of a late Victorian gas-works which is a poorly studied class of Industrial Monument. Sub-surface features related to these two phases of industrial use are likely to be disturbed by this development.
- 1.3 The Archaeology Service of Wrexham County Borough Council in their capacity as archaeological advisors for the county have determined that an Archaeological Desk-top assessment is necessary to assess the implications of the proposed development on the archaeological resource and that a watching brief be maintained to record any features revealed during the development.. Accordingly a brief has been prepared by Wrexham Archaeology Service (dated 17th October 1996) which describes the scheme of archaeological works required.

2 Objectives

- 2.1 The objectives of the Assessment and Watching Brief are:
 - 2.1.1 to reveal by desk-based assessment, the nature, condition, significance and, where possible, the chronology of the archaeology within the area of the proposed development in so far as these aims are possible;
 - 2.1.2 to maintain archaeological supervision of all groundworks associated with the development and to record and excavate features as necessary thus preserving through record any archaeological monuments revealed during the development;
 - 2.1.3 to prepare a report outlining the results of the assessment and watching brief;

3 Methods

- 3.1 The assessment will be carried out according to the guidelines in the *IFA Standard and Guidance for Archaeological Desk-Based Studies* and will involve the examination of all the readily available primary and secondary records relating to this part of the town, including documentary and cartographic sources. Archives and repositories will include The Regional Sites and Monuments Record held by CPAT Curatorial, the National Monuments Record, Aberystwyth, the National Library of Wales, The County Record Office and Records held by the Ironbridge Institute The Borehole and test-pit data will be requested from the developers where appropriate.
- 3.2 The watching brief will be carried out according to the guidelines submitted with the Curatorial Brief and will involve the examination of all the groundworks in the archaeological sensitive areas.
- 3.3 All archaeological deposits and/or features noted during the watching brief will be recorded by drawn section and/or photography.

- 3.4 Following the on-site work an illustrated and bound report will be prepared according to the principles laid out in the Curatorial Brief (p5 ff.). This will be in A4 format and contain conventional sections on: Site location, Topography and Geology; Historic Background; Catalogue of sites identified with notes on their condition and significance, Conclusions and Recommendations and References, together with appropriate appendices on archives and finds.
- 3.5 The site archive will be prepared to specifications laid out in Appendix 3 in the Management of Archaeological Projects (English Heritage, 1991).

4 Resources and Programming

- 4.1 The assessment and watching brief will be undertaken by a skilled and experienced archaeologist. Overall supervision will be by Dr A Gibson, a senior member of CPAT's staff who is also a member of the Institute of Field Archaeologists.
- 4.2 All report preparation will be completed by the same field archaeologist who conducted the assessment and watching brief.
- 4.3 It is anticipated that the assessment will take no more than five days in all but the length of time taken for the watching brief will depend on the progress of the clients' contractors. The subsequent report would be prepared immediately thereafter, dependent on the client's instructions and the arrangement of a suitable timetable. The date of commencement, at the time of writing, has yet to be agreed with the client, and will be dependent on the state of the site and negotiated access. The archaeological curator will be informed of the detailed timetable and staffing levels when agreement has been reached with the client.
- 4.4 Requirements relating to Health and Safety regulations will be adhered to by CPAT and its staff.
- 4.5 CPAT is covered by appropriate Public and Employer's Liability insurance.

A.M. Gibson
25th October 1996

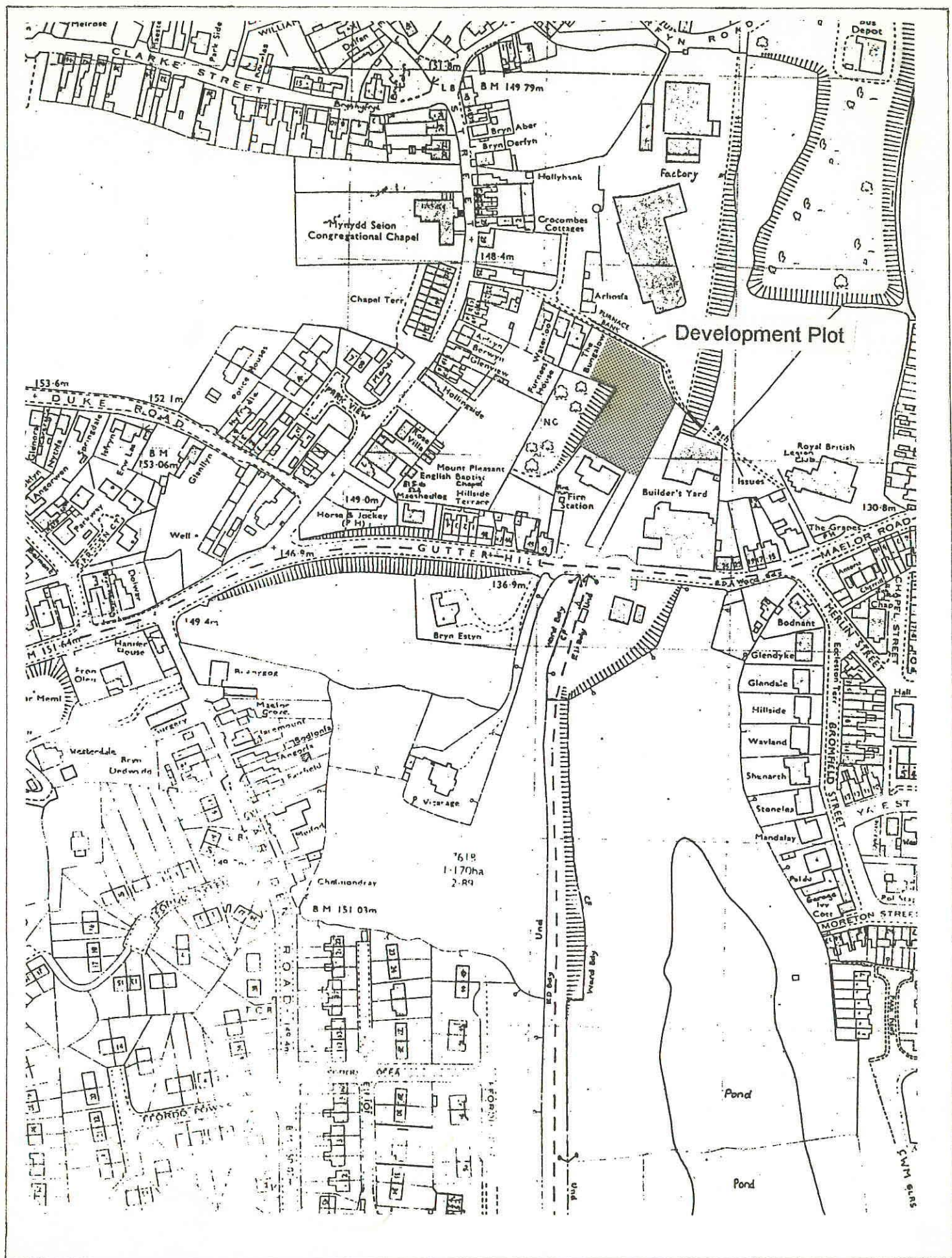


Fig 1 Location, Scale 1:2500

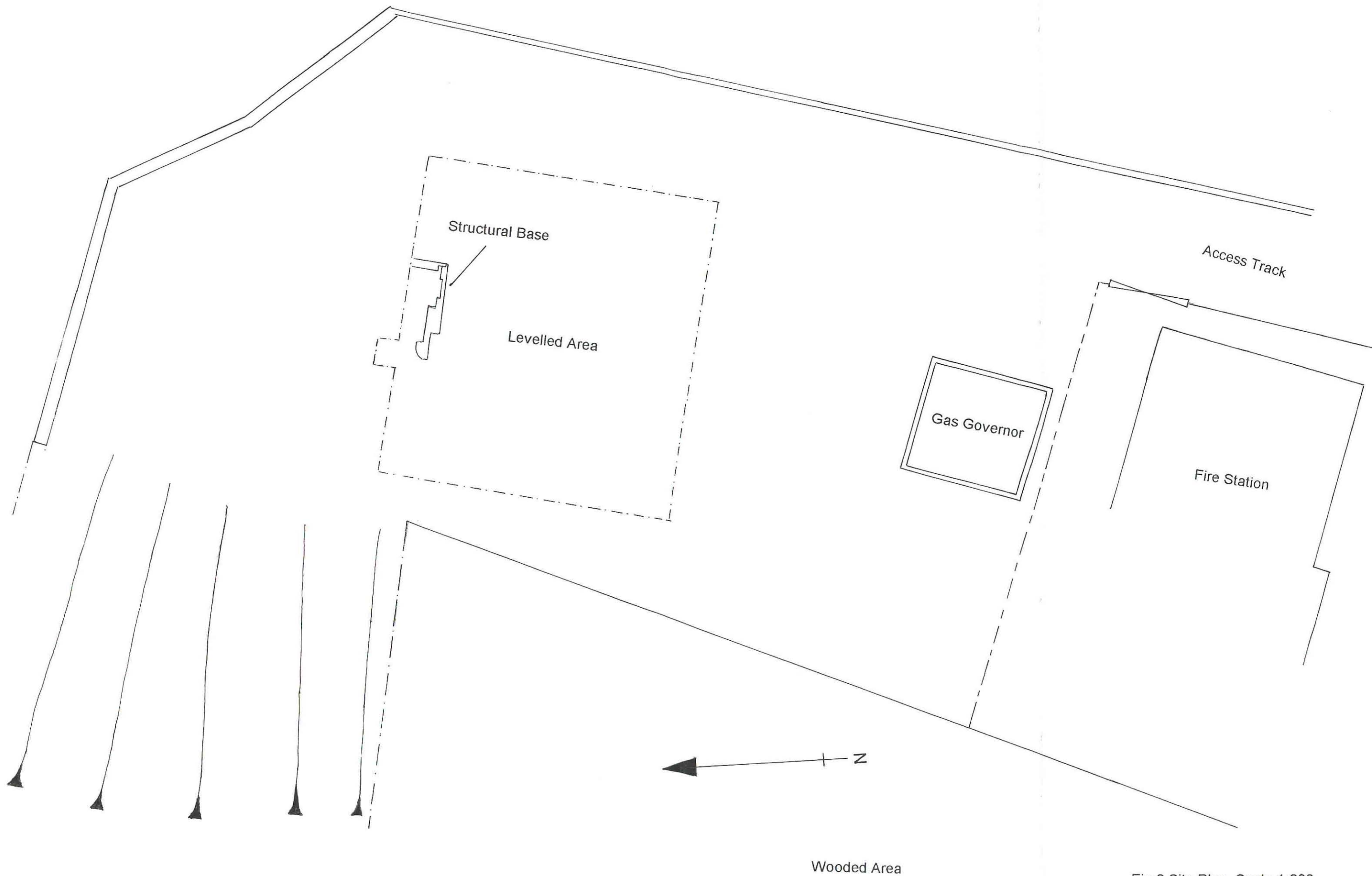


Fig 2 Site Plan, Scale 1:200

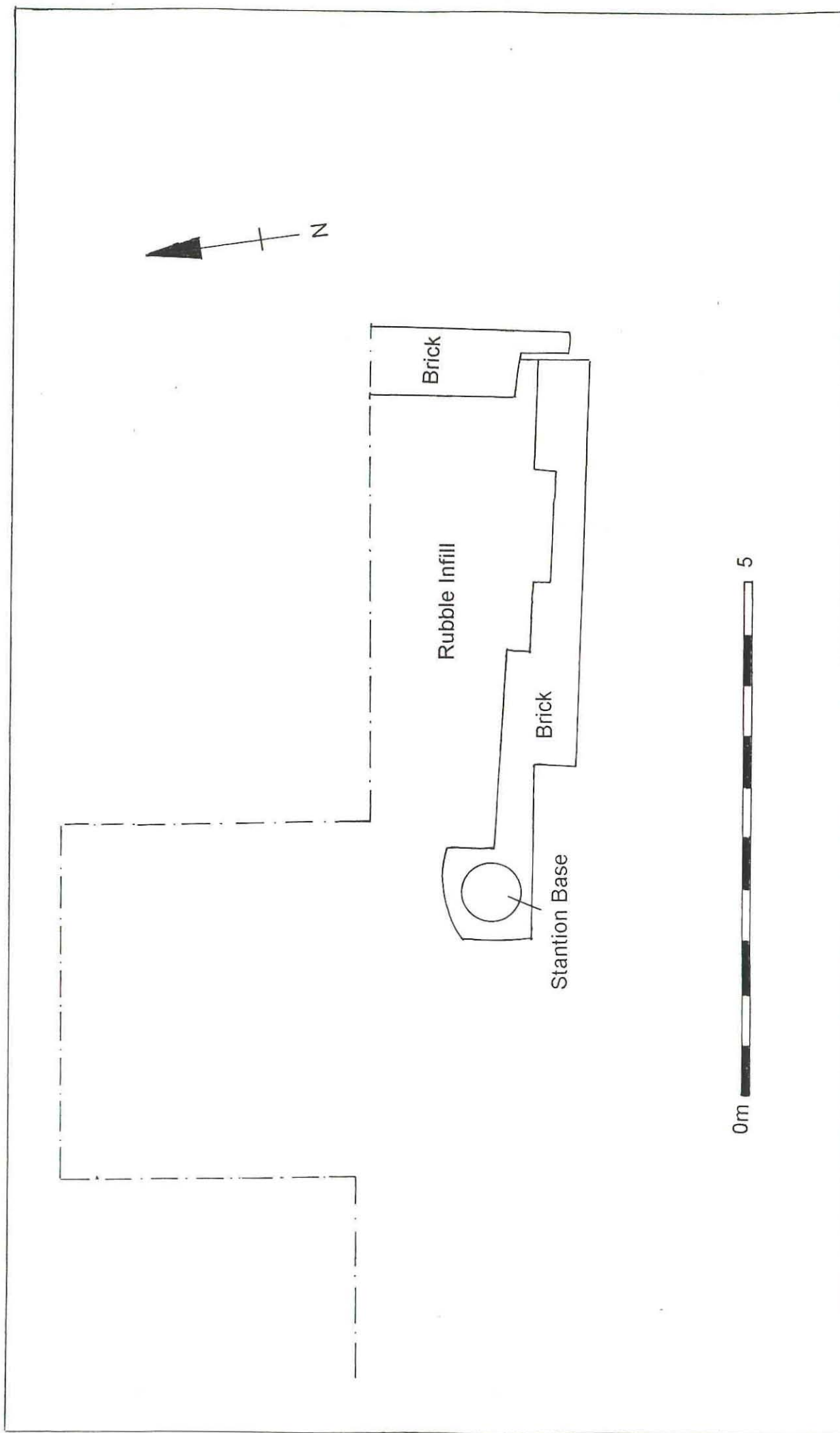


Fig 3 Structural Base, Scale 1:50

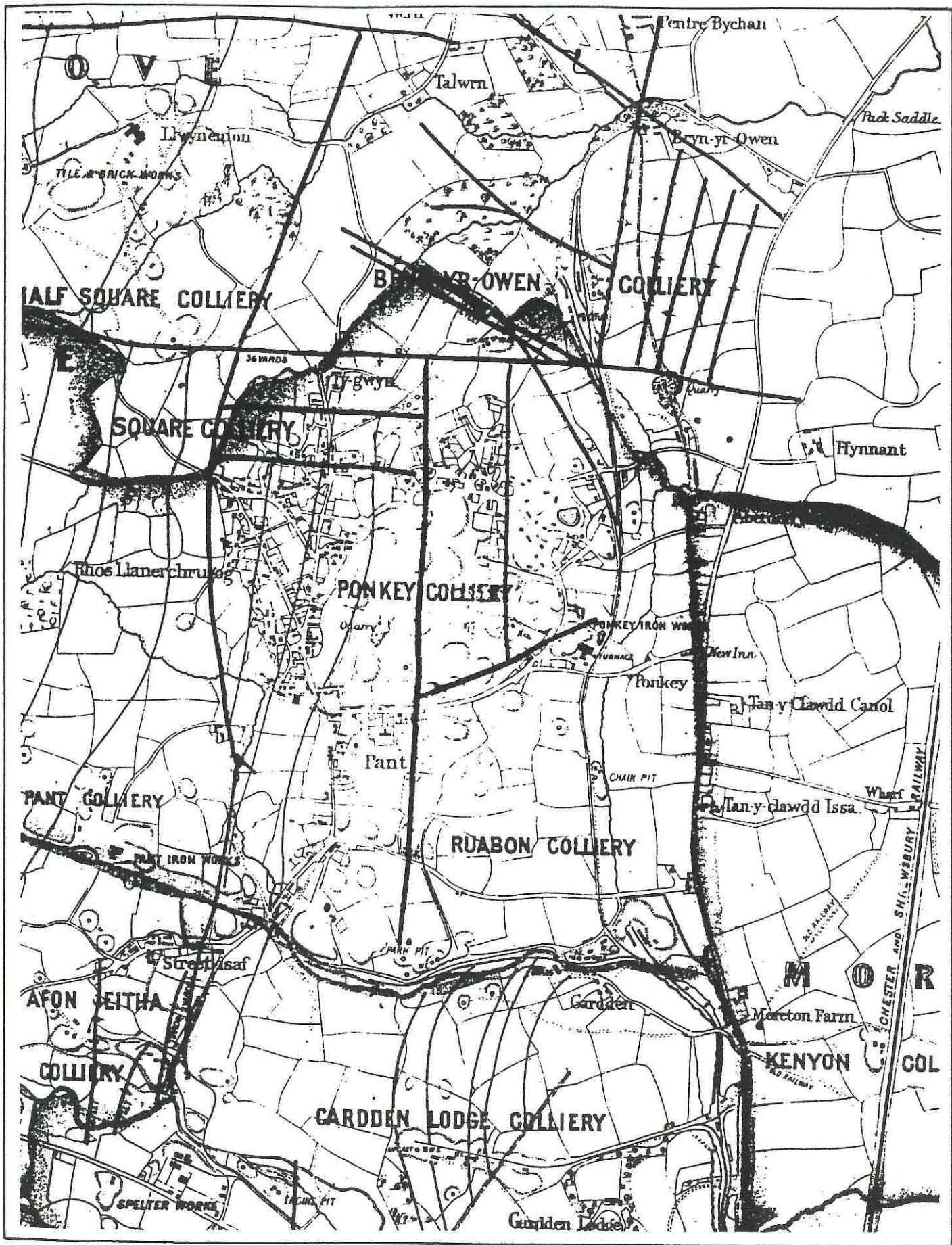


Fig 5: Part of map of the Minera Lead Mining District and the Brymbo and Ruabon Coal Field (Brenton Symmons, 1865)

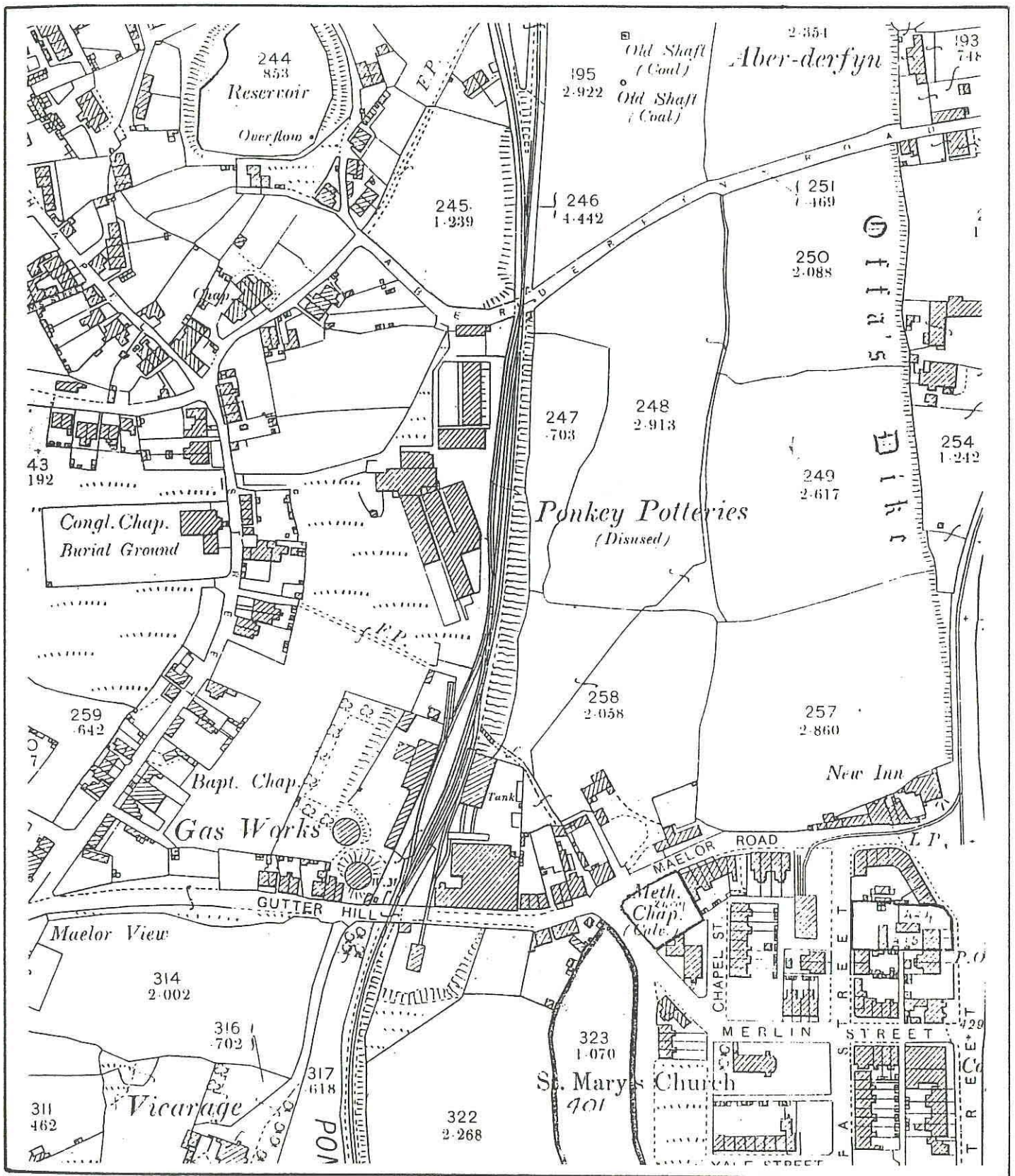


Fig 6: 25" Ordnance Survey Sheet, 1899

