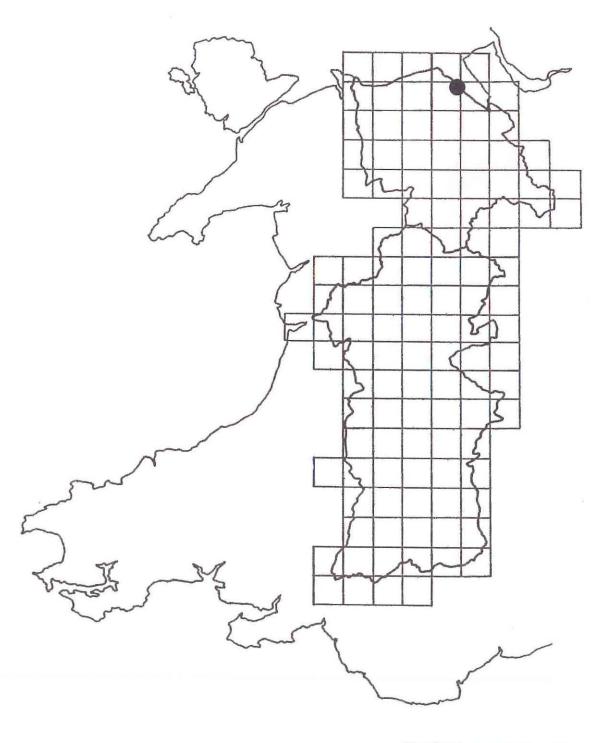
# Holywell to Greenfield Gas Pipeline, Clwyd WATCHING BRIEF



**CPAT Report No 114** 

# Holywell to Greenfield Gas Pipeline, Clwyd WATCHING BRIEF

by R Hankinson November 1994

Report prepared for British Gas Transco

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#### 1 Introduction

- 1.1 At the beginning of September 1994 British Gas Transco requested a quote from the Clwyd Powys Archaeological Trust (CPAT) for a watching brief during pipeline installation works to the north of Holywell High School, between Holywell and Greenfield in Clwyd.
- 1.2 The watching brief had been recommended by Clwyd Archaeology Service, a part of Clwyd County Council, acting as the archaeological curator, and was due to the proximity of a known length of Wat's Dyke.
- 1.3 British Gas Transco accepted CPAT's quote for the work verbally, which was subsequently confirmed in writing at the end of September. The watching brief, however, commenced during the first full week in September and was completed at the end of October 1994. This report was prepared immediately afterwards.

# 2 Geographical Background

- 2.1 The length of pipeline that was the subject of the watching brief commenced in the grounds of Holywell High School at SJ 1899 7644. From this point the pipeline ran in a northerly direction, first to the north-north-east and then to the north-north-west, before terminating near Abbey Smallholding at SJ 1918 7700, where it was connected to the existing gas main.
- 2.2 The solid geology of the area is most probably encompassed within the millstone grit of the Carboniferous period, although in this locality it is covered by a layer of reddish till of glacial origin. The soils derived from this till are slowly permeable, fine loamy soils of the Brickfield 2 Soil Association (Rudeforth et al 1984).

## 3 The Watching Brief

- 3.1 The installation work was accomplished in two stages, with the majority of the pipe being laid during September, and the final connection to the mains at the end of October. The pipe trenching was preceded by a topsoil stripping phase in the first stage of work but not during the connection of the new pipeline to the existing main.
- 3.2 The initial pipe laying was in the fields to the east of Coed Strand. No evidence of the dyke or any related features were seen in the topsoil-stripped area or in the pipe trench.
- 3.3 Examination of the eastern boundary of Coed Strand provided evidence of the existence of the dyke, in the form of a ditch and counterscarp bank; the ditch is presently occupied by a footpath with a gravel surface. The line of this section is marked on Fig 2, and, on this evidence, the initial phase of pipe installation can be seen to have occurred to the east of the line of the dyke.

- 3.4 The connection to the existing main took place to the north of the presently known section of dyke evident on Fig 2. The existing main runs along the track bed of the now dismantled Holywell Railway, and it was hoped that the railway embankment at the connection point might have sealed a portion of the dyke.
- 3.5 The excavation of the connection point took the form of a pit, approximately 4m x 2.5m x 2m deep, joined by an angled trench to the pipe laid in the initial phase. The natural subsoil was evident in the bottom of the trench and pit, but no definite traces of the dyke were revealed. The only suggestion of its presence was a levelling off of the subsoil, which dips fairly steeply to the north-west mirroring the ground surface. However, the landscaping work which took place during the construction of the railway in the 19th century may well have been responsible for this feature.
- 3.6 The railway embankment, as seen in the connection pit, was built to a height of 1.8m above the subsoil, and was composed of a mixed grey-brown soil containing numerous stones. A layer of metal working slag appeared to have been spread on its upper surface, presumably as a base on which to lay the track.

#### 4 Conclusions

- 4.1 No certain evidence of Wat's Dyke was revealed by the pipeline installation works; the observations noted in paragraphs 3.3 and 3.5 suggest that the line of the dyke was to the west of the pipeline area and that no deposits or features related to the dyke were affected by the scheme.
- 4.2 In view of the fact that the existing gas pipe runs along the former line of the Holywell Railway at a depth of approximately 1.5m, the disturbance caused to the bed of the railway by the present scheme has been relatively insignificant.

### 5 Acknowledgements

CPAT would like to thank the staff of the pipeline contractors, O.C.Summers, for their help and assistance throughout the course of the scheme.

#### 6 Sources

# 6.1 References

Rudeforth et al 1984 <u>Soils and Their Use in Wales</u> Soil Survey of England and Wales, Bulletin No 11, Harpenden.

Smith B. and George T.N. 1961 <u>British Regional Geology - North Wales</u> British Geological Survey HMSO London.

# 6.2 Cartographic Sources

1878 (1871 survey) First edition Ordnance Survey 1:10560 map (Flintshire 6 SW)

