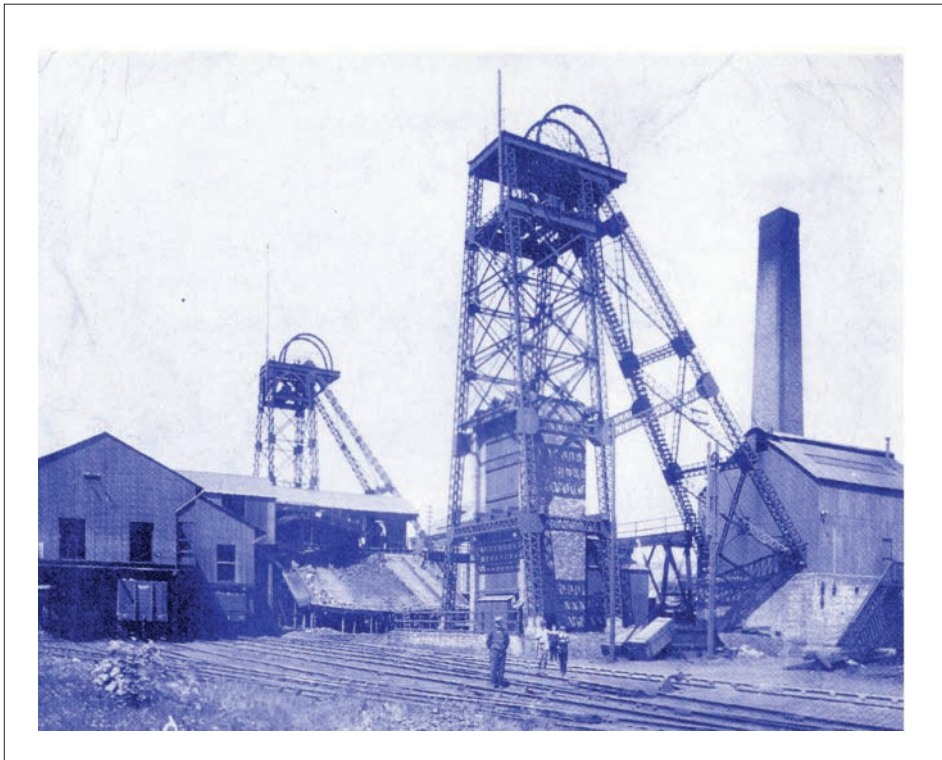


Gatewen Colliery, Moss Wrexham.

Archaeological Evaluation



By
Ken Owen

Report No. 542

ARCHAEOLOGICAL EVALUATION

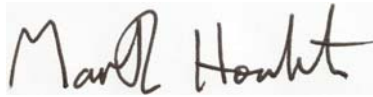
**Gatewen Colliery, Moss
Wrexham**

BY *Ken Owen*

Prepared for:
Morston Assets Ltd.
Morston House
Jacobs Place
High Street
Holt
Norfolk
NR25 6BH

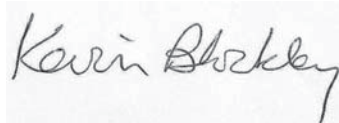
CAP Report No: **542**

Signed by:



Mark Houlston, Unit Director

Approved by:



Kevin Blockley, Company Director

Date: November 2008



Cambrian Archaeological Projects Ltd
Old Chapel Farm
Tylwch
Llanidloes
Powys
SY18 6JR

Telephone: 01686 413857 / Fax: 01686 411280
e-mail: admin@cambarch.co.uk

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Non Technical Summary

This report results from work undertaken by Cambrian Archaeological Projects Ltd (CAP) on behalf of Morston Assets Ltd. of Holt, Norfolk and managed by CgMs Consulting, Newark, Notts. The work is in advance of a development of residential units on 10 Hectares of land centred on NGR SJ 3134 5180, which is roughly 2Km West of Wrexham, North Wales.

The archaeological evaluation involved a series of six trenches on the former colliery of Gatewen, which is located in the Moss valley. Trenches 1, 4 and 6 were void of colliery structures, apart from demolition material, whilst trenches 2, 3 and 5 provided evidence for high levels of preservation.

The three latter trenches showed that there is a high potential for the good survival of a substantial amount of colliery buildings within the area.

1 Introduction

1.1 Location and scope of work

1.1.1 The Location of the site is roughly 2Km West of Wrexham, North Wales within the southern extent of the Moss Valley. This is a shallow valley with a gentle North-West to South-East orientation leading from Moss to Wrexham (Fig.1).

1.1.2 An archaeological Desk Based Assessment was carried out by Wardell Armstrong in 2004, and by CgMs in June 2008 where it was established that an archaeological evaluation was necessary to inspect the condition of the former structures associated with the Gatewen Colliery.

1.1.3 It was proposed by Wardell Armstrong in their report of 2004, 'Specification for Archaeological Excavation', that six evaluation trenches should be excavated each of which would be 15m x 2m in size (Fig.11).

1.2 Geology and topography

1.2.1 The site of the proposed development is located within the former colliery of Gatewen, though none of the former colliery buildings are to be seen above ground. There are a few demolished structures on site. These are likely to be associated with a HGV training centre which has only recently been closed. The main part of the site is covered by a concrete surface. To the North-West is a large hill of coal waste which is now overgrown with small trees, as is much of the site.

1.2.2 The Moss Valley slopes gently towards the South-East. The site is located at the Western side of the valley (Fig.2).

1.2.3 The sedimentary formations here are of Lower Westphalian coal measures of the Upper Carboniferous, underlain by Namurian Millstone Grit of the same Quaternary period. The drift geology is undifferentiated glacial sands and gravels

1.3 Archaeological and historical background

1.3.1 The earliest known occupation within the proposed development area is the former Gatewen Colliery, which was built in 1874 and had started coal production by 1877. It closed in c.1934.

1.3.2 The site was re-opened in 1957 and used as an opencast coal disposal point until 1966. Later it was used as a HGV training centre, which was shut relatively recently.

1.3.3 A railway was in use both during the colliery period and subsequently. It remained in use until the railway closures of the early 1960s. The railway was used for industrial traffic and as a local passenger service

1.3.4 The archaeological background to the evaluation was the subject of a 'Specification for Archaeological Evaluation' by Wardell Armstrong in August 2004, and a desk-based assessment (DBA) carried out in June 2008 by CgMs Consulting.

2 Aims and Objectives

2.1 Recording

2.1.1 To recover and record archaeological information with the aid of photography, plans and context sheets which would otherwise be destroyed by the proposed scheme and prepare a report on the results.

2.1.2 To collate and assess all cartographic information relevant to the area which will have a bearing on the said works.

2.1.3 To assess the topography and landuse of the area through maps and site visits during the course of the said works.

2.2 Field Evaluation

2.2.1 To establish the presence/absence of archaeological remains within the proposal area paying particular attention to any colliery activity.

2.2.2 To determine the extent, condition, nature, character, quality and date of any archaeological remains present.

- 2.2.3 To establish the ecofactual and environmental potential of archaeological deposits and features.
- 2.2.4 To appraise the likely impact of the proposal on any surviving archaeological deposits and, if appropriate, to make suggestions for a mitigation strategy or, where areas contain archaeology of national importance, for preservation *in situ*.

3 Evaluation Methodology

3.1 Scope of Fieldwork

- 3.1.1 The evaluation consisted of six machine dug trenches with an 11tonne 360 degree mechanical excavator using a 2m wide toothless bucket. The machine also had a pecker for breaking the concrete surface and toothed 1m and 0.30m buckets for working in either rough or narrow areas.
- 3.1.2 The evaluation was undertaken by Ken Owen (Project Manager) and Hywel Keen (Project Assistant). After the initial removal of the concrete and demolition debris with the machine all the archaeological levels were cleaned by hand, before photography and further recording. All sections and plans were drawn to a scale of 1:20
- 3.1.3 All works were undertaken in accordance with both the IFA's *Standards and Guidance: for an archaeological desk-based assessment and archaeological evaluation* and current Health and Safety legislation.

3.2 Finds

- 3.2.1 A few very poorly preserved metal finds were recovered but not kept. No ceramic or glass finds were found on the site.

3.3 Palaeo-environmental evidence

- 3.3.1 No deposits suited to environmental sampling were located during the evaluation.

3.4 Presentation of results

- 3.4.1 Section 4 outlines the results from each trench. An inventory of all contexts is presented in Appendix III. All OD levels are included in the figures on the drawn sections and plans.

4 Evaluation Results

4.1 Soils and ground conditions

4.1.1 Generally the site and weather conditions were reasonably good. There were some occasional showers but it was generally dry. The ground conditions were very dry due to the large volume of industrial activity and backfill that was encountered.

4.2 Distribution of deposits

4.2.1 On removal of the concrete surface the trenches were observed to be fairly similar. All of them contained significant amounts of demolition material. It was apparent that the demolition had been used to build up the ground level, in some areas by as much as 1.75m.

4.3 Descriptions of trenches

Trench 1 (Fig.5) (Plate 1) Fan Drift

4.3.1 After the removal of the concrete and tarmac surface (001) the trench was excavated in spits. The layer below the surface was an orangey grey layer with an average depth of 0.30m containing large amounts of crushed brick (054) used for the general levelling of the ground before the laying of the concrete surface. The layer below (054) was a large deposit of demolition material (055) containing broken brick and mortar with a maximum depth of 0.60m. There was a narrow band of sandy clay below the demolition which seemed to be natural (056), below which was a greyish brown silty sand natural (059). These deposits were also located in other parts of the site.

Trench 2 (Fig.6) (Plates 3+4) Fan and Compressor House

4.3.2 The concrete (001) was removed in this trench to again reveal a crushed brick levelling layer similar to Trench 1 with an average depth of 0.36m (060). After the removal of (060), three brick walls were initially revealed running in a North-South direction. Surrounding these was demolition material very similar to that found in Trench 1, although in this trench the layer contained far more building material, mainly brick (061). This material was excavated for a further 1.50m. With the total depth of the trench now over 2.20m below ground surface, it was decided to cease excavation on safety grounds. The height of the walls at this depth was 1.80m with the demolition material continuing between wall (062) to the East of the trench and wall (063), which was near the centre. Between (063) and wall (064) c.5m to the West the appearance of water within the demolition material at a depth of 1.50m below the surface suggested that there may be a channel or drain within the walls at this point. All the aforementioned walls were 0.38m in width and would have been interior walls within the Fan and Compressor House.

There was also a very badly truncated wall at the West of the trench (065) which was originally far more substantial. This wall had a width of 0.76m and would seem to be the exterior wall at the western side of the building.

Trench 3 (Fig.7) (Plates 2) *Winding Engine House (Upshaft)*

- 4.3.3 After removal of the concrete surface (001) within this trench and the upper layer of backfill, it was noticeable that there were later structures within the trench and part of the earlier colliery building that had been truncated. To the southern half of the trench and associated with the colliery phase of structures a small wall of one brick in width survived (039) to a height of three courses. A parallel wall, at a distance of c.0.50m to the North of (039) and with a width of 0.24m (040), created a cavity between these two walls. To the South of (039) and butting against it, there was a brick floor (037) with a length of 2.50m, edged by bricks (038). To the South of this floor, natural (059) was observed at a depth of 2.00m. The northern half of the trench contained walls of a later phase (032), (041) and (044), which had truncated the earlier colliery walls. A very large amount of unworked sandstone blocks (043) was also found in this area. These had been re-used as a foundation for the later walls and may have originally formed part of the base for the winding gear associated with the earlier colliery phase.

Trench 4 (Fig.8) (Plate 5) *Former Railway Track/Loading Bay*

- 4.3.4 Trench 4 was located to the West of the other trenches and was orientated North-South within the former railway track. It was also the only trench that did not require concrete to be broken prior to excavation. After removal of the grass and a very thin layer of topsoil there was a layer of ballast (047) with an average depth of 0.32m. Below the ballast was a very dark grey demolition layer containing occasional fragmented brick (048). On the northern side of the trench, natural was reached (049)=(059) at a depth of c. 0.70m. The northern part of the trench was extended to 17m as two brick pillars were found in this area (052)+(053). These pillars were butted by a demolition layer (050), which was only seen in the northern half of the trench. The pillars were cutting into an ash/coke/coal waste (051) deposit with a maximum thickness of 0.30m, which was also only seen at the northern side of the trench.

Trench 5 (Fig.9) (Plate 7+8) *Winding Engine House (Downshaft)*

- 4.3.5 This trench was located roughly 10m North of Trench 3 and was excavated to investigate the other winding house associated with the downshaft pit. On removal of the concrete surface (001), at the northern side of the trench, a very compacted surface of fragmented yellowish sandstone was revealed. This contained irregularly shaped and angular blocks up to 200mm in size (015). Below (015), at the southern extent, was a wide sandstone wall or support base with a face to the South (023). This feature was quite substantial and included two recesses within the excavated area. To the North of this feature and below surface (015) there was a very compacted area containing large irregularly shaped blocks

of a grey limestone set within a matrix of a dark grey sand (014). Deposit (014) was not totally removed because a brick arch (022) was also encountered within the matrix. The orientation of the arch was ENE-WSW and it was over 0.80m wide. This arch was either a culvert or tunnel. At present there is no further information on this feature apart from the fact that it was orientated towards the downshaft pit. The southern half of the trench consisted of two brick floors. These were located nearer the centre (025), and towards the South (028). At the southern extent brick floor (028) was overlain by wall (029). The total extent of this wall is not currently known as it continues underneath the southern section of the trench. Towards the centre of the trench were two parallel walls (026) and (027), both with an E-W orientation, these two walls partially overlie floors (025) and (028) respectively.

Trench 6 (Fig.10) (Plate 6) ***Tramroad***

- 4.3.6 This was the most northerly trench in the sequence and was excavated to investigate the line of a possible tramroad. The tramroad took a course from the upshaft pit to the waste tip located further to the North-East. After the removal of the concrete surface (001) the only features encountered were a series of demolition backfills, and dumps of coal and shale waste near the base of the trench. At c.2.00m natural (059) was reached, the conclusion being that the former tramroad had been removed. On close inspection of the OS Maps (Figs.3+4), however, it seems the railway track within the colliery went below the tramroad. The tramroad may have been a high level overhead track, which would explain why no evidence was found.

5 Discussion and Interpretation

5.1 Reliability of field investigation

- 5.1.1 Although there was large scale demolition of the colliery after its closure in 1934 the foundations of the structures seem to have survived. In the demolition strategy that was adopted, the buildings were not totally removed but infilled with rubble. This meant that only the upper parts of the colliery buildings were demolished and that the ground level was raised through demolition. It also preserved the lower part of the structures and floors in situ.
- 5.1.2 There may be some damage to the colliery buildings from the later phase of development, but from the evaluation results it seems there is a very good scale of preservation with walls and floors surviving intact.

5.2 Overall interpretation

- 5.2.1 The evaluation revealed that a very significant part of the former colliery survives below the current ground level, preserved by the demolition material.
- 5.2.2 Trenches 1, 4 and 6 did not produce any significant archaeological features apart from the two pillars within the northern side of Trench 4.
- 5.2.3 Trenches 2, 3 and 5 were located around the Compressor House and Winding Engine Houses. These produced walls and floors in a very reasonable state of preservation, as well as a culvert within Trench 5.

5.3 Significance

- 5.3.1 Due to the normal practise of colliery sites being heavily demolished after the end of their lifespan, a site with a reasonably good survival of structures such as Gatewen Colliery would provide an opportunity of gaining more knowledge of the local coal industry in the Wrexham area.

6 Acknowledgements

- 6.1.1 Thanks to: Hywel Keen for his assistance with the archaeological evaluation at the site, and also to Mark Westhead for his careful control and patience with the excavator.

7 Bibliography and References

Dale, Roderick (2008) 'Land at Former Gatewen Colliery, Gatewen Road, Wrexham, Clwyd'.
DBA by CgMs Consulting for Morston Assets Ltd..

Hodgkinson, D. (2004) 'Specification for Archaeological Evaluation'
DBA by Wardell Armstrong for Hiremade Pension Fund.



APPENDIX I:

Figures and Illustrations



Fig 01: Location of Gatewen Colliery, Moss, Wrexham.

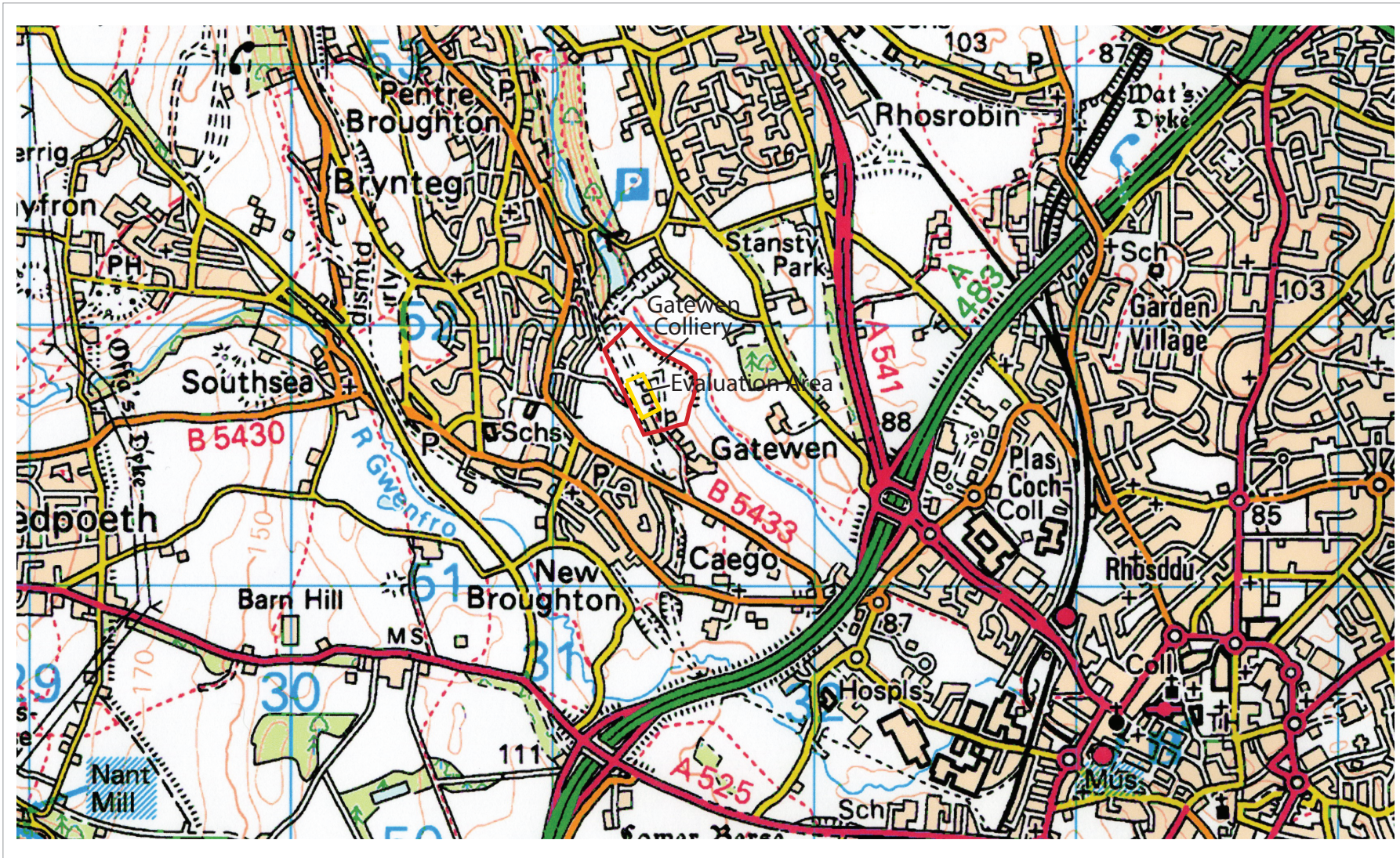


Fig 02:Location Map showing Evaluation Area.

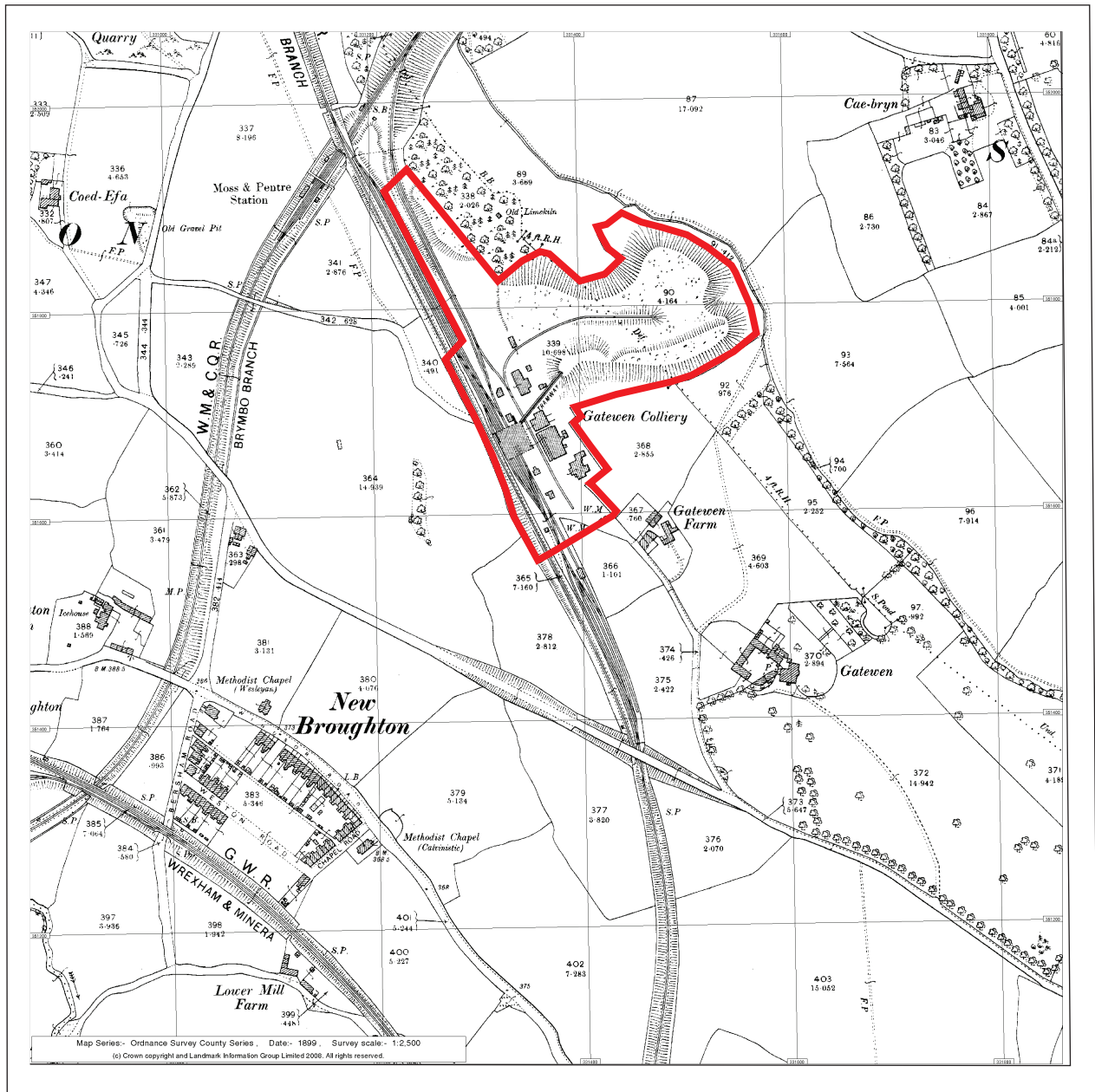
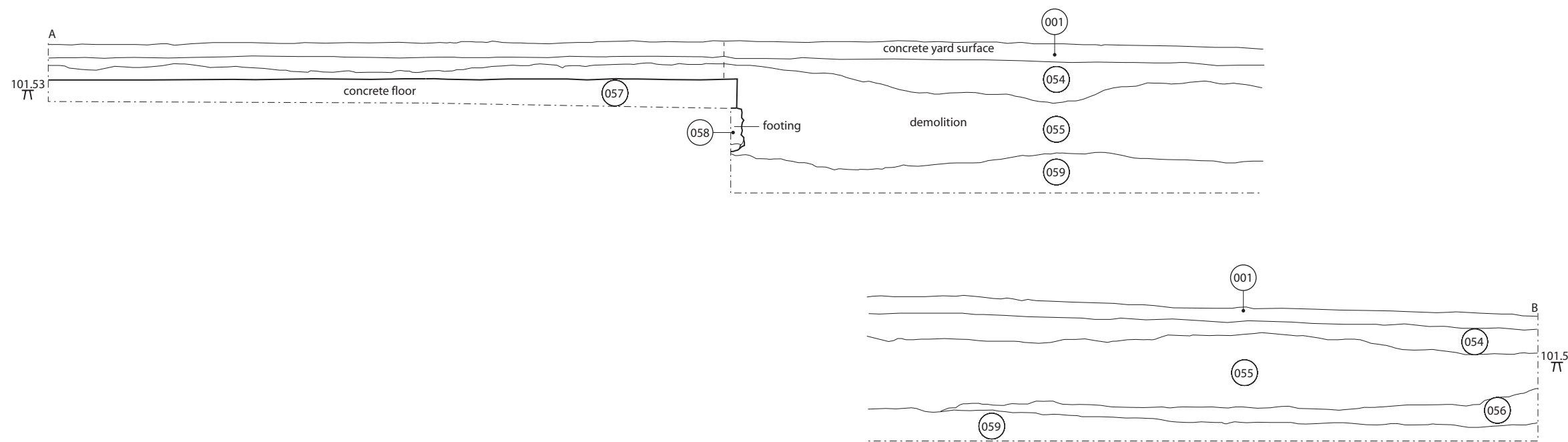
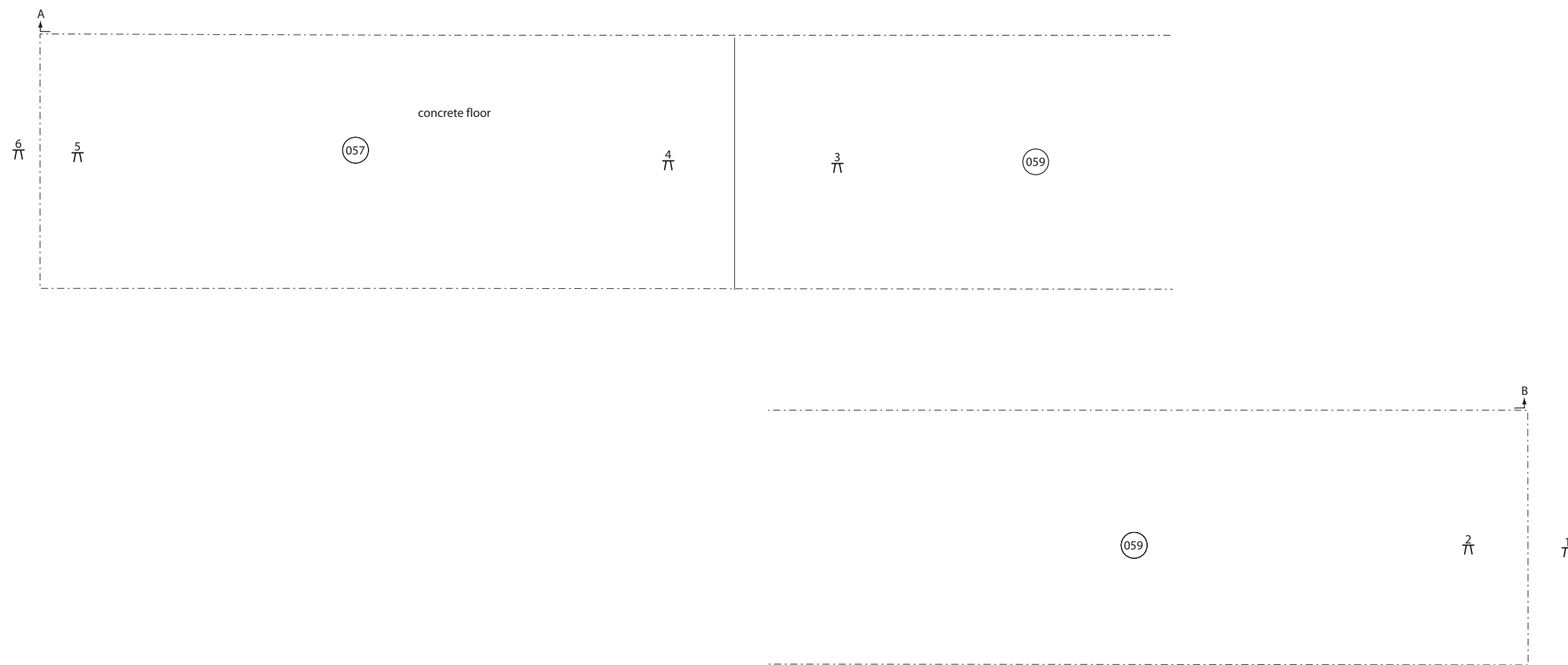


Fig.03 :2nd Edition OS Map 1899, 1:2500.



Fig.04 : 1915 OS Map. 1:10560



Job Title: Gatewen Colliery

Drawing Title: Trench 1

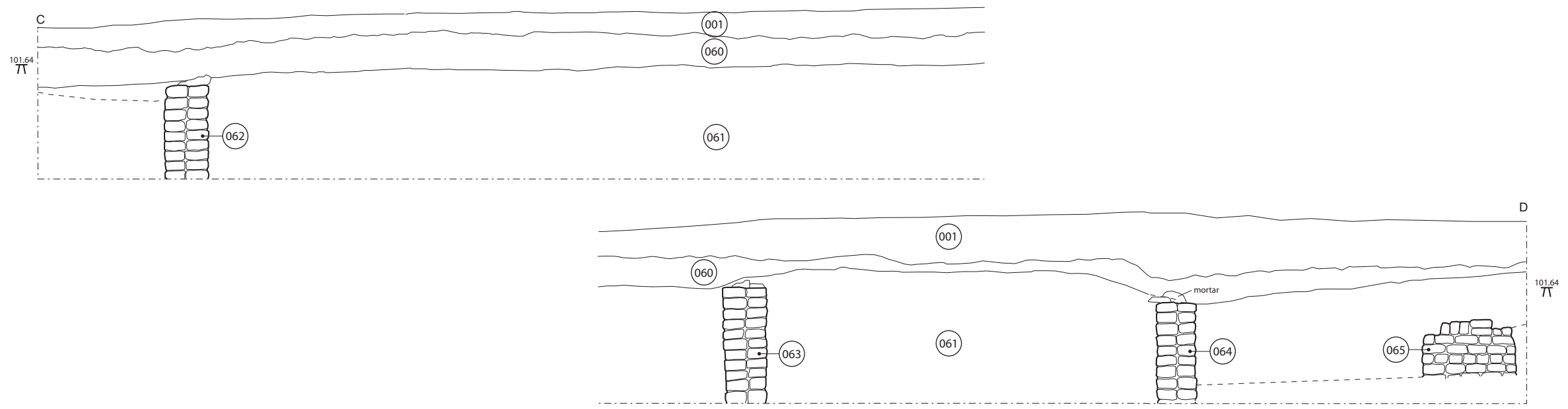
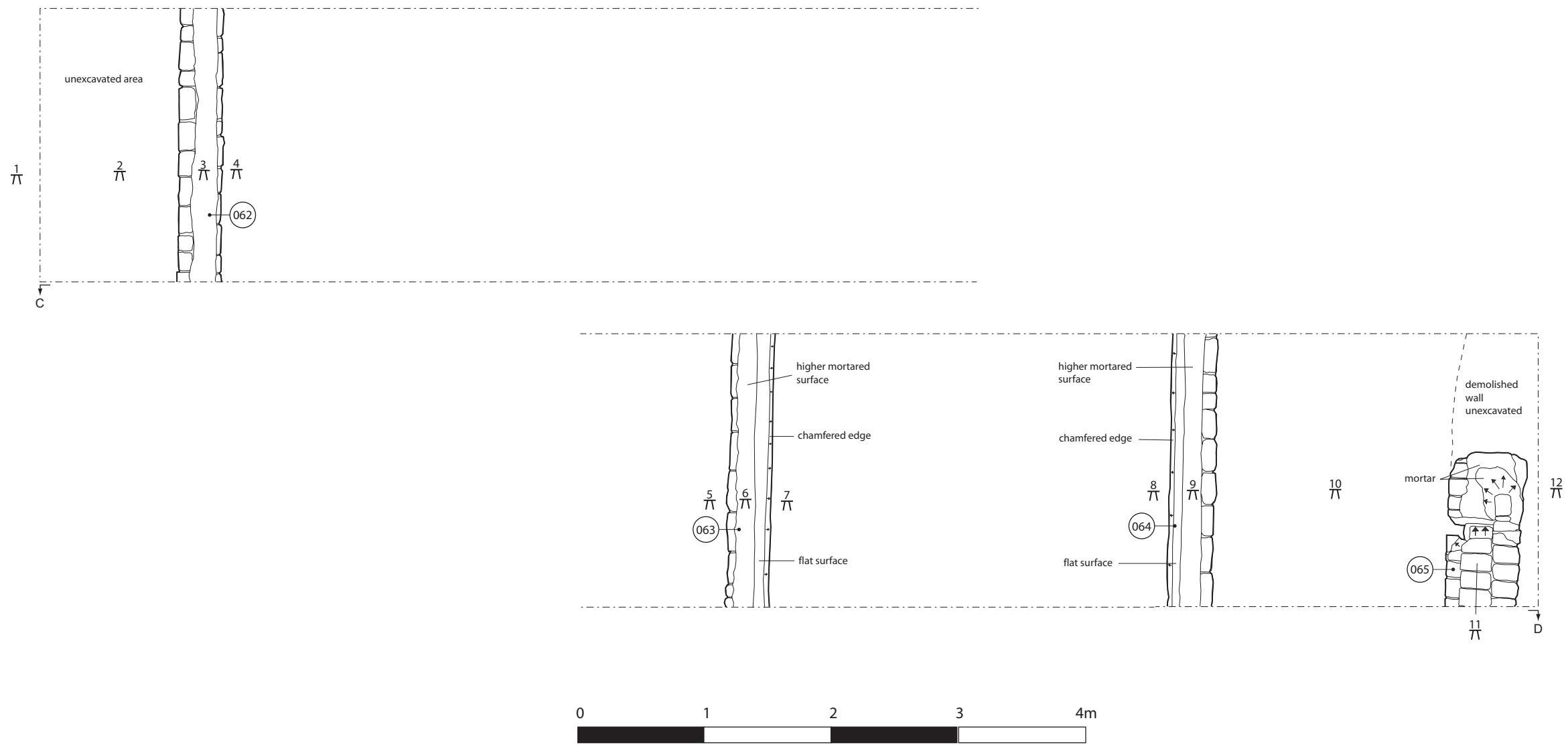
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Drawn By: I L Bernardus

Scale: 1 : 40 @ A3

Figure 5

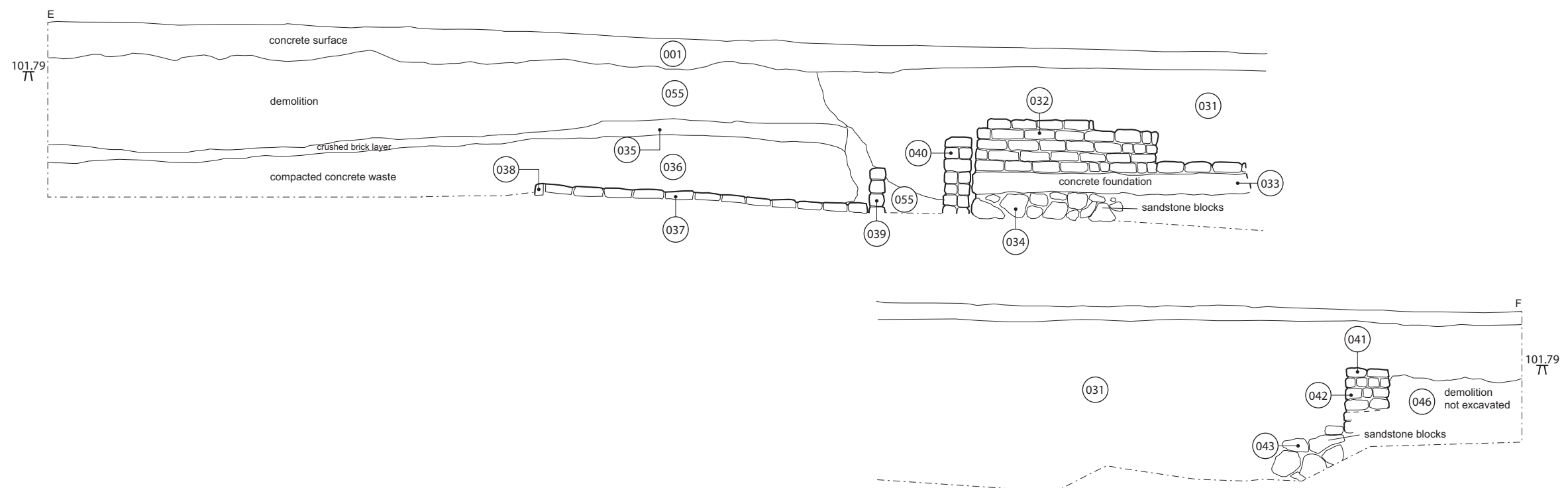
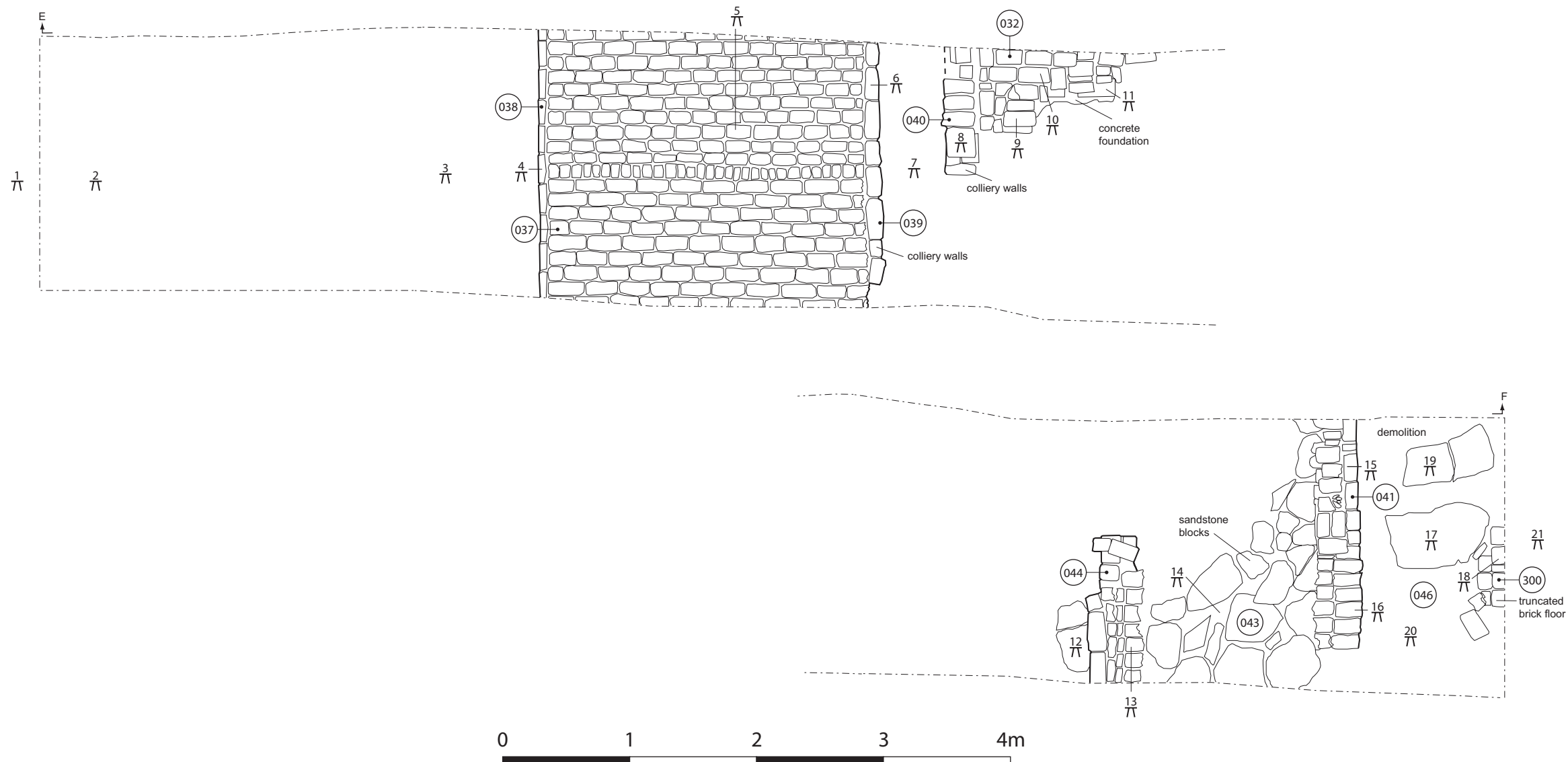




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Drawing Title:	Trench 2
Date:	21/11/2008
Drawn By:	I L Bernardus
Scale:	1:40 @ A3

Figure 6

CAMBRIAN
ARCHAEOLOGICAL
PROJECTS



Job Title: Gatewen Colliery

Drawing Title: Trench 3

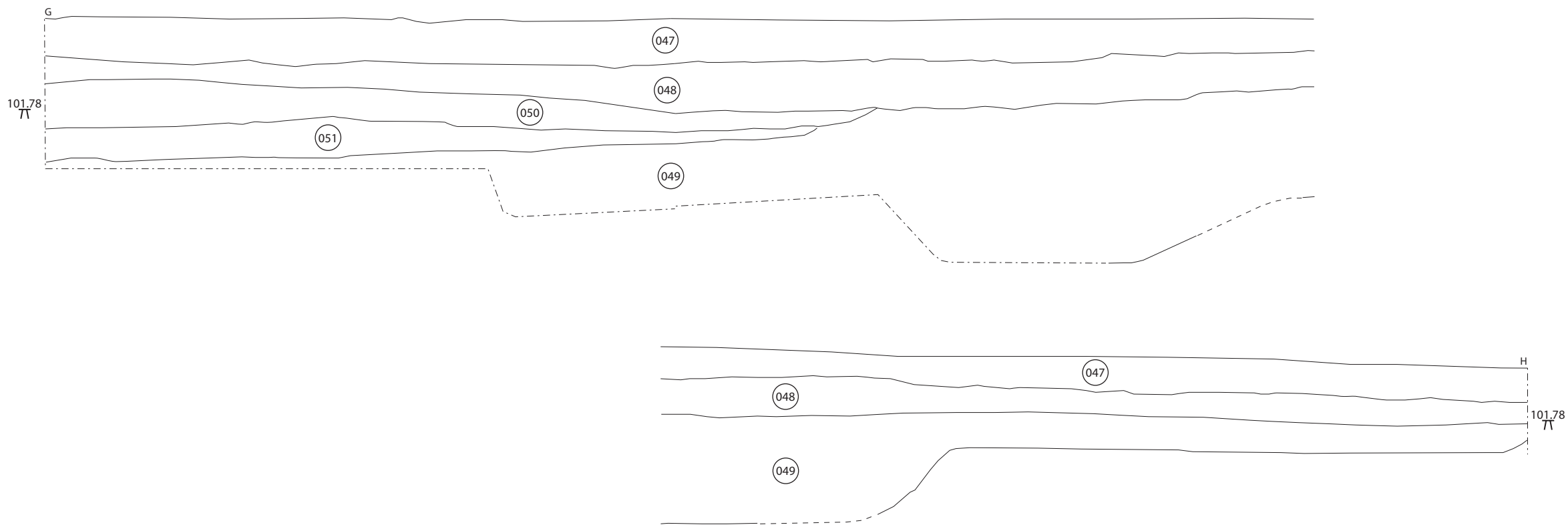
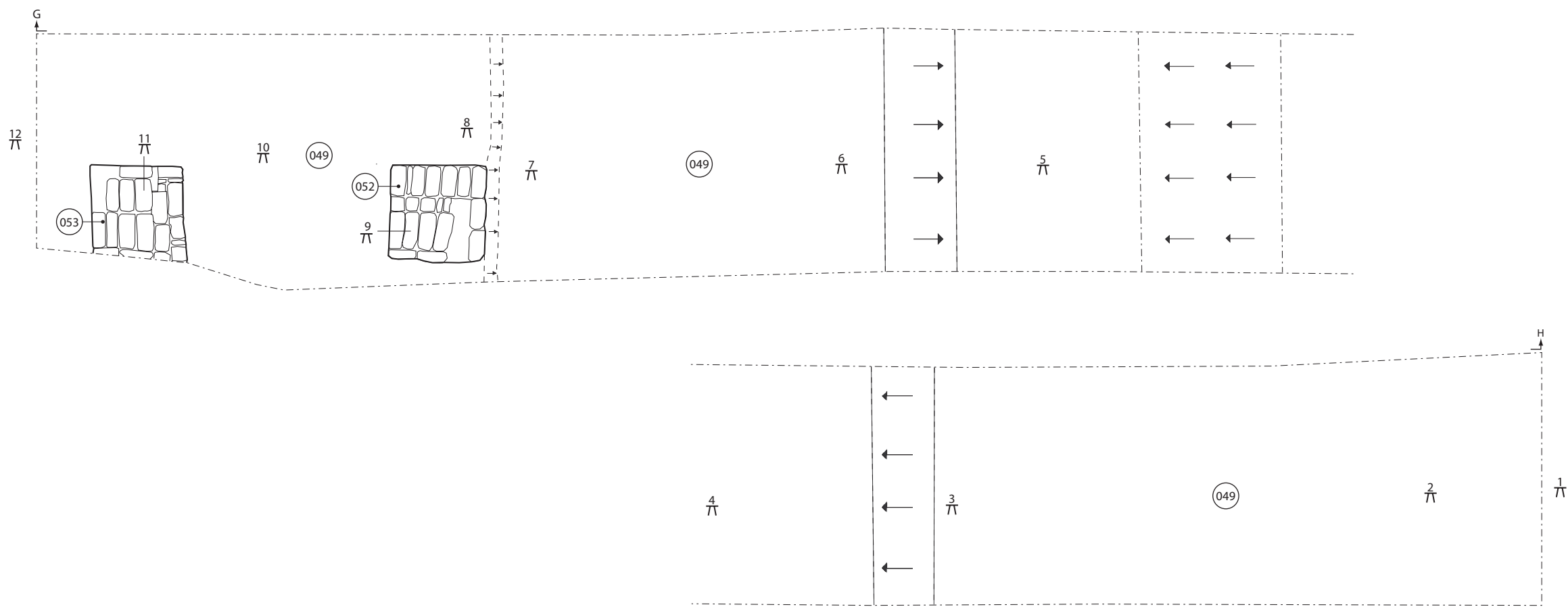
Date: 25/11/08

Drawn By: I L Bernardus

Scale: 1 : 40 @ A3

Figure 7





Job Title: Gatewen Colliery

Drawing Title: Trench 4

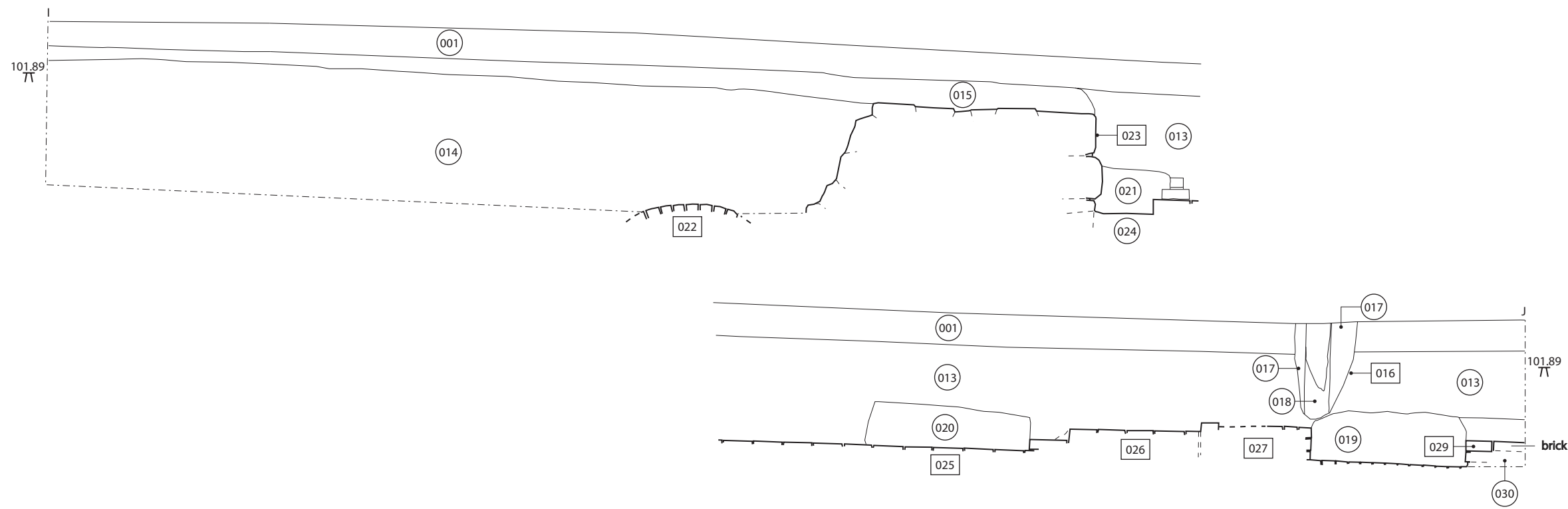
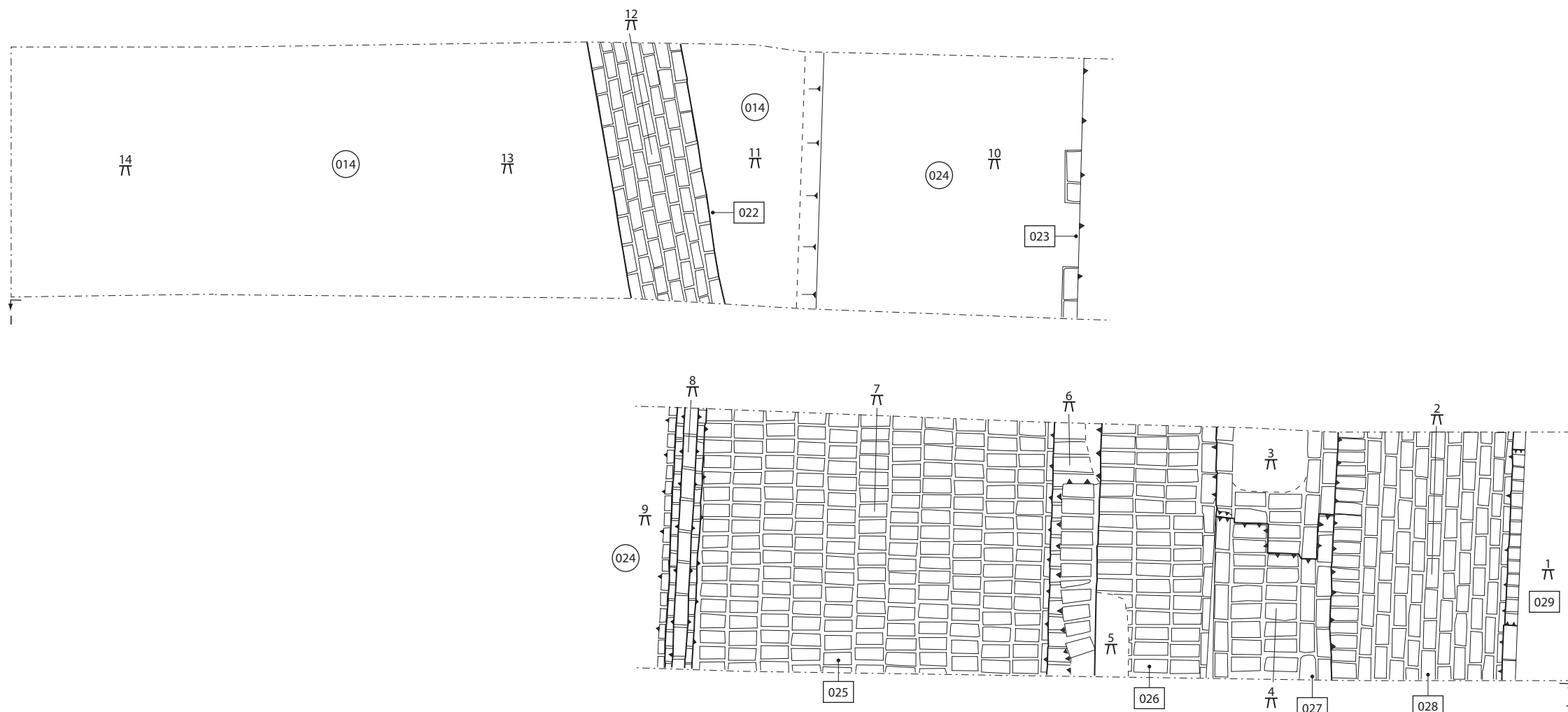
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Figure 8

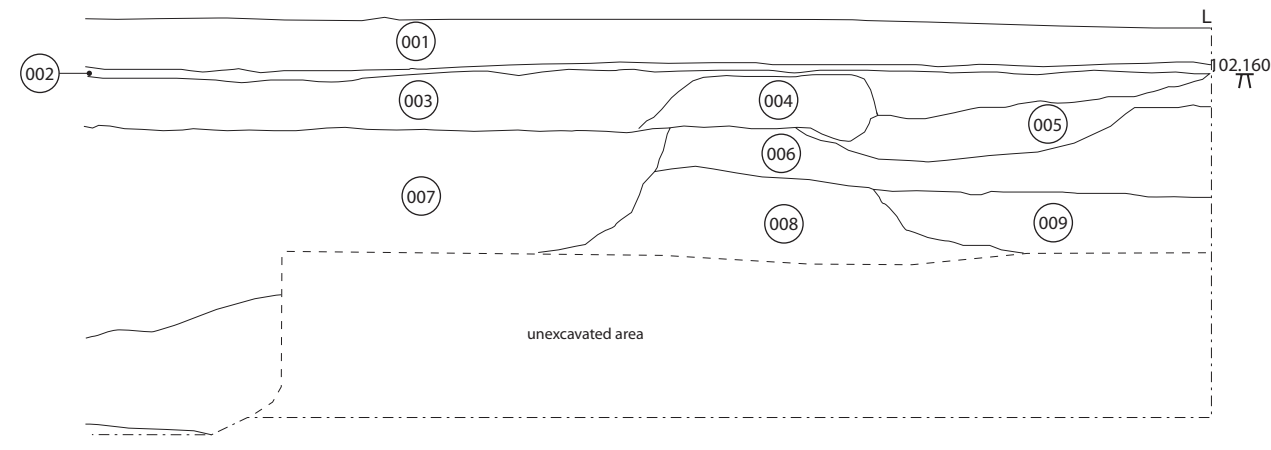
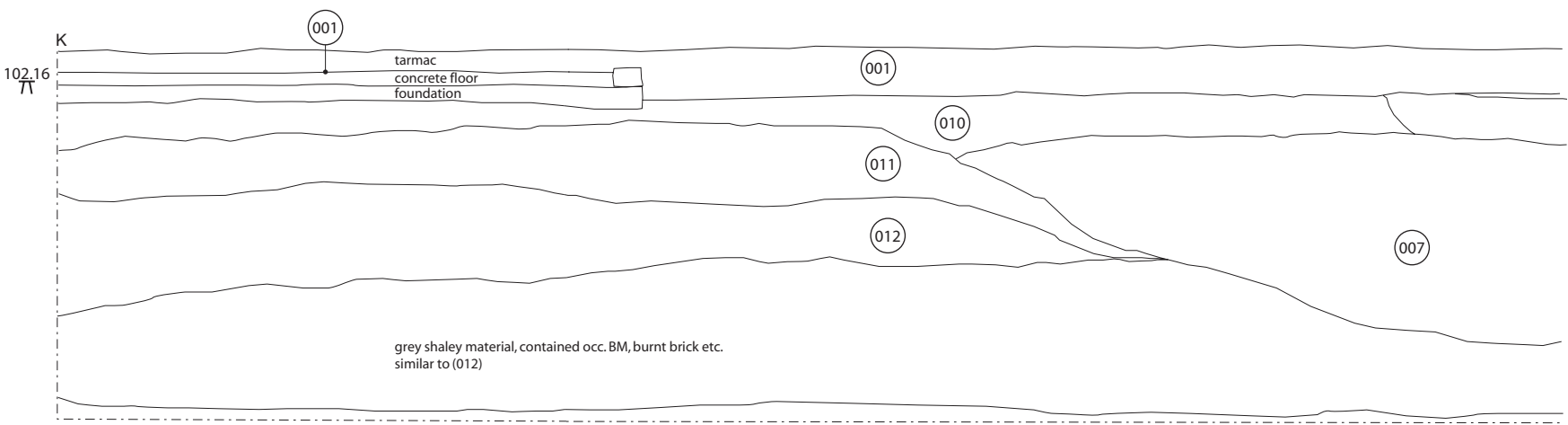
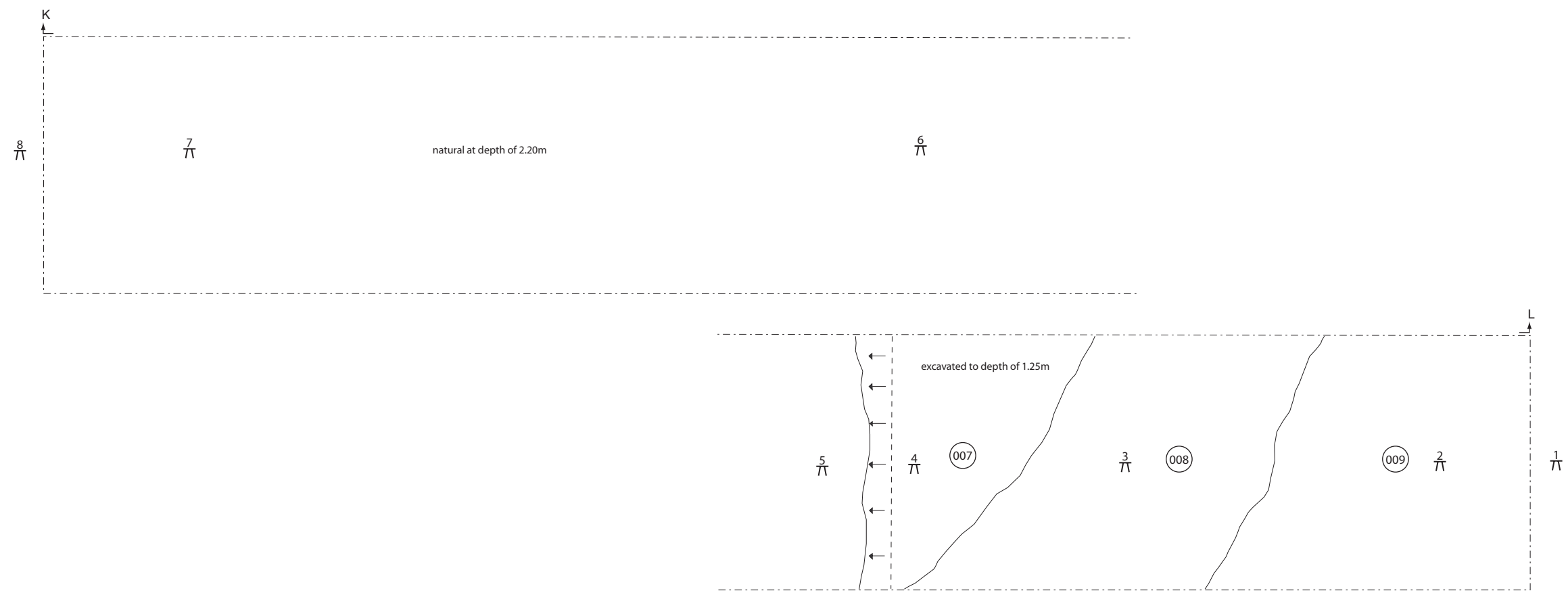




Job Title: Gatewen Colliery
Drawing Title: Trench 5
Date: 26/11/08
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Scale: 1 : 40 @ A3

Figure 9





Job Title:	Gatewen Colliery
Drawing Title:	Trench 6
Date:	26/11/08
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Figure 10



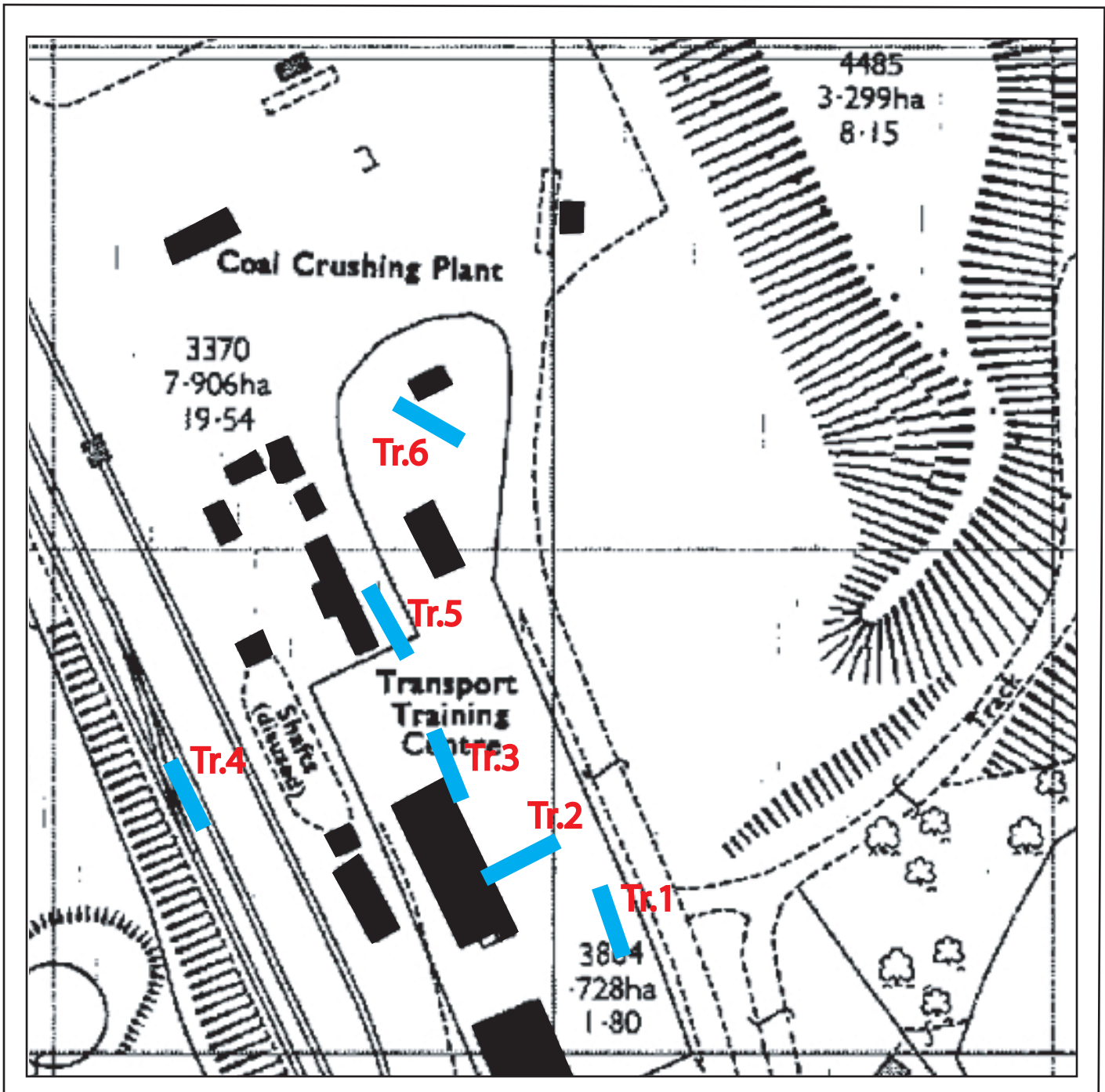


Fig.11 : Location of Evaluation Trenches.



APPENDIX II:
Photo Plates



Plate 01: Tr.1, Oblique shot of West facing section showing natural (059) at base.



Plate 02: Tr.3, General shot of trench with floor (037) to foreground. CAP Report No. 542



Plate 03: Tr.2, Fan and Compressor House, N-S orientated inner walls.



Plate 04: Tr.2, The damaged western wall of the Compressor House. CAP Report No. 542



Plate 05: Tr. 5, Excavated to natural (049), brick pillars to North of trench.



Plate 06: Tr. 6, Trench excavated to natural (059), facing North.



Plate 07: Tr. 5, Brick floors to the South of trench (025) and (028).



Plate 08: Tr. 5, North of the trench, culvert (022) in foreground.



APPENDIX III:
Context Register

CAMBRIAN ARCHAEOLOGICAL PROJECTS LTD.

CONTEXT REGISTER

SITE: Gatewen Colliery, Moss
GC/08/EVAL

Sheet 1

CONTEXT NO.	COMMENTS	DRG NO.	DATE	SIGN
001	Tarmac/concrete surface	6/02	05/11/08	KO
002	Thin band of building material/demolition	..	..	..
003	Very dark demolition material	..	..	..
004	Demolition containing brick/sandstone	..	..	..
005	As above, but lighter in colour	..	..	..
006	Layer of coal	..	..	..
007	Fragmented shale and clay mix.	..	..	..
008	Layer of shale and silt	..	..	..
009	Greyish brown sandy clay	..	..	..
010	Demolition, similar to (004)	..	..	..
011	Bands of sandy clay	..	..	..
012	Fragmented shale, similar to (008)	6/02	05/11/08	KO
013	Demolition containing brick, sandstone and coal	5/11	13/11/08	HK
014	Tightly packed sandstone/limestone	..	..	..
015	Sandstone blocks, layered to form surface	..	..	..
016	Cut for post	..	..	..
017	Concrete packing for posthole	..	..	..
018	Soil infill and decayed post	..	..	..
019	Sandy deposit	..	..	..
020	Sandy deposit	..	..	..
021	Cinder/coal deposit	..	..	..
022	Brick arch for culvert/tunnel	..	..	..
023	Rusticated stone face to stone rubble (012)	..	..	..
024	Stone/coal rubble surface below (019)	..	..	..
025	Brick floor with simple edging at North	..	..	..
026	Brick surface associated with (023)	..	..	..
027	Brick surface associated with (026)	..	..	..
028	Brick floor associated with (025)	..	..	..
029	Brick surface above (028) and (026)	..	..	..
030	Coarse black soil/coal mix between (026)+(027)	5/11	13/11/08	HK
031	Large area of demolition backfill	3/09	13/11/08	KO
032	Later brick wall	..	..	..
033	Concrete foundation for wall (032)	..	..	..
034	Sandstone foundation for (033)	3/09	13/11/08	KO

CAMBRIAN ARCHAEOLOGICAL PROJECTS LTD.

CONTEXT REGISTER

SITE: Gatewen Colliery, Moss
GC/08/EVAL

Sheet 2

CONTEXT NO.	COMMENTS	DRG NO.	DATE	SIGN
035	Layer of crushed brick	3/09	13/11/08	KO
036	Compacted concrete waste	..	..	..
037	Brick floor	..	..	..
038	Edging for (037)	..	..	..
039	Brick wall	..	..	..
040	Brick wall, parallel to (039)	..	..	..
041	Later brick wall	..	..	..
042	Sandstone bricks, below (041)	..	..	..
043	Sandstone block area, used as foundation	3/09	..	..
044	Later brick wall	3/10	..	..
045	Brick floor, badly truncated	3/10	..	..
046	Demolition or foundation for (045)	3/09	13/11/08	..
047	Ballast	4/05	11/11/08	..
048	Demolition	..	..	..
049	Natural	..	..	..
050	Demolition and crushed brick	..	..	..
051	Dark layer of ash, coke and coal waste	4/05	..	..
052	Brick pillar, South	4/06	..	..
053	Brick pillar, North	4/06	11/11/08	..
054	Levelling layer	1/03	10/11/08	..
055	General demolition	..	..	..
056	Narrow band of sandy clay	..	..	..
057	Concrete floor	..	..	..
058	Concrete foundation	..	..	..
059	Natural	1/03	10/11/08	..
060	Levelling layer	2/07	12/11/08	..
061	General demolition	..	..	..
062	Brick wall to East of trench	..	..	..
063	Brick wall near centre of trench	..	..	..
064	Brick wall West of centre of trench	..	..	..
065	Brick wall to West of trench	2/07	12/11/08	KO



APPENDIX IV:
Archive Cover Sheet

ARCHIVE COVER SHEET

Gatewen Colliery, Wrexham

Site Name: Gatewen Colliery, Moss
Site Code: GC/08/EVAL
PRN:
NPRN :
SAM:
CAP Report No: 542
NGR: SJ 3134 5180
Site Type: Industrial
Project Type: Evaluation
Project Officer: Ken Owen
Project Dates: 03/11/2008 to 14/11/2008
Categories Present:
Location of Original Archive:
Location of duplicate Archives:
Number of Finds Boxes:
Location of Finds:
Museum Reference:
Copyright:
Restrictions to access: None



Cambrian Archaeological Projects Ltd
Old Chapel Farm
Llanidloes
Powys
SY18 6JR

Telephone: 01686 413857
e-mail: admin@cambarch.co.uk