

PROPOSED RESIDENTIAL DEVELOPMENT AT MACHYNYS EAST, LLANELLI ARCHAEOLOGICAL FIELD EVALUATION



Prepared
by
Cambria Archaeology
for
LLANELLI COAST JOINT VENTURE



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MACHYNYS EAST, LLANELLI
ARCHAEOLOGICAL FIELD EVALUATION**

By

Cambria Archaeology Field Services

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SUMMARY

Llanelli Coast Joint Venture is proposing to develop three areas of housing on the northern fringe of Machynys, Llanelli (centred on NGR SS50739831). The proposals are part of a long-term, wide-ranging development programme aimed at regenerating the coastal areas around Llanelli. Machynys has been central to that programme and the construction of the proposed housing at the Machynys East site is the first phase of the development.

Earlier assessment of the site highlighted the long and varied history of the Machynys area, in particular the mid to late 19th century industrial expansion and associated housing, and recommended that an archaeological evaluation of the site be carried out in support of any planning application (Page 2006). Llanelli Coast Joint Venture commissioned Cambria Archaeology to undertake evaluation during May 2007.

The evaluation showed that there are extensive surviving below ground remains of the 19th century Machynys community. It was possible to match the results from the evaluation with Ordnance Survey maps and identify specific structures such as remains of the houses and yards in Brick Row and Cliff Terrace. Remains of Machynys School also survived and evidence for the water and electricity supplies for Cliff Terrace were recorded.

The demolition and landscaping have removed substantial amounts of archaeological deposits, but enough appeared to survive to suggest that further excavation may reveal significant information about the history and development of Machynys and the people that lived and worked there.

INTRODUCTION

Llanelli Coast Joint Venture is proposing to develop three areas of housing on the northern fringe of Machynys, Llanelli (centred on NGR SS50739831). The proposals are part of a long-term, wide-ranging development programme aimed at regenerating the coastal areas around Llanelli. Machynys has been central to that programme and the construction of the proposed housing at the Machynys East site is the first phase of the development.

Earlier assessment of the site highlighted the long and varied history of the Machynys area and recommended that an archaeological evaluation of the site be carried out in support of any planning application (Page 2006). Llanelli Coast Joint Venture commissioned Cambria Archaeology to undertake the evaluation of the proposed development site during May 2007.

The scope and aims of the evaluation

The main aim of the evaluation was to target those areas of the site that contained former structures in order to characterise the presence, extent, nature and date of any below ground archaeological remains associated with them.

The project was also aimed at providing enough information on the archaeological resource to enable assessment of the likely impact of any development proposals on that resource, and to help inform future management decisions in areas that may require further archaeological work.

Report outline

This report briefly describes the physical environment of the area with a discussion and description of the known archaeological resource before detailing the results of the evaluation.

Abbreviations used in this report

Any references to sites in the text that are recorded on the regional Historic Environment Record (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). References to cartographic and documentary evidence and published sources will be given in brackets throughout the text, with full details listed in the sources section at the end of the report.

THE EVALUATION AREA

The massive industrial expansion of the 19th century turned Machynys from an agricultural district to an industrial landscape. The flat lands of Llanelli Marsh around Machynys and the areas around Seaside – to the west of Machynys – were seen as ideal building land for both factories and worker housing and by the end of the 19th century factories and housing extended as far as Machynys House.

The evaluation site occupied c.12ha of former housing and industrial land on the north slope of Machynys Mound (Fig. 1). Its north boundary is formed by the Llanelli coast road, to the east it is bounded by the new Machynys Golf Course and to the south by the site of the former Machynys House. The west edge of the site extends as far as Cockle Pickers Way.

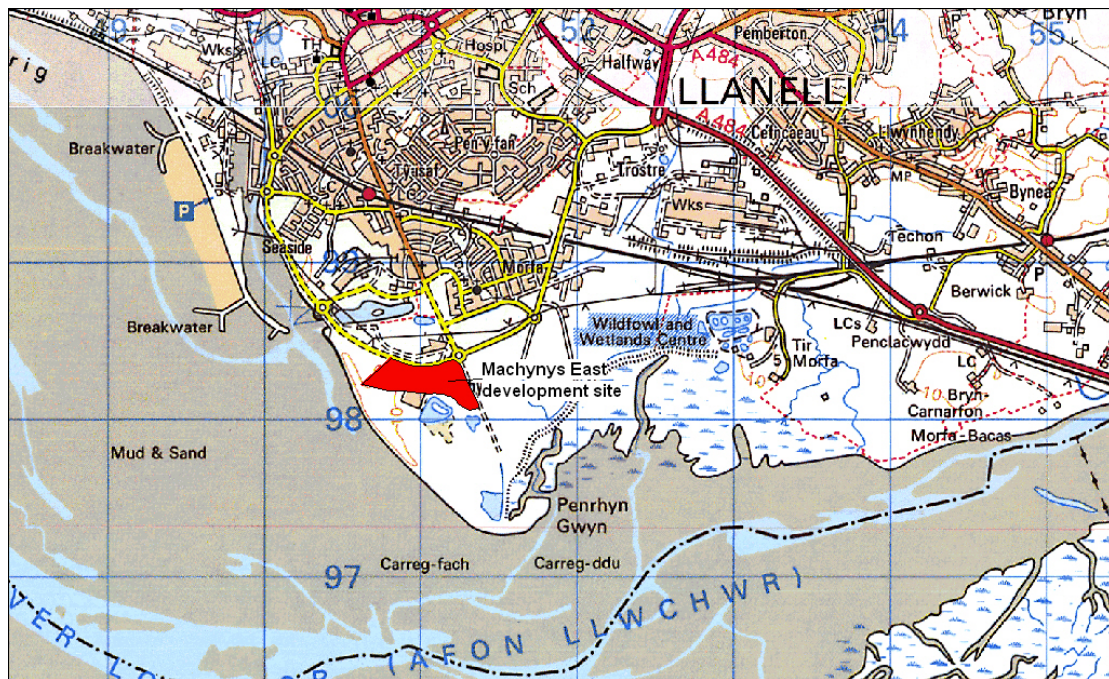


Figure 1: Location map of proposed development area

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THE EVALUATION

Methodology

Five trenches (Fig.2) each measuring 10m x 1.8m were excavated using a JCB excavator with a 1.8m wide toothless grading bucket. In all trenches the turf and topsoil was removed by machine down to the top of the archaeological deposits or natural subsoil. Where archaeological features or deposits were revealed they were cleaned by hand, photographed, drawn to scale and then either wholly excavated or test excavated to establish as far as possible their character. During excavation all exposed deposits and features were described and allocated their own individual context number. After excavation, all features were photographed and planned at 1:20 scale and, where relevant, sections were drawn to a scale of either 1:10 or 1:20.

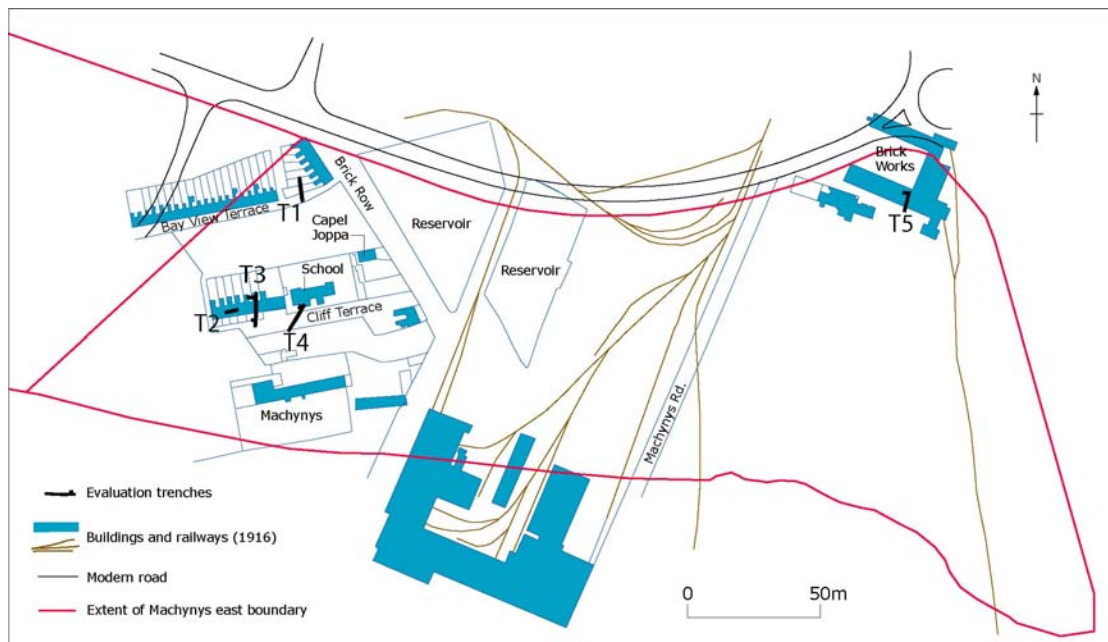


Figure 2: Plan showing the location of the trial trenches overlying information from early 20th century mapping of the area.

Results

The trenches were intended to investigate specific targets identified from Ordnance Survey mapping during the original desk-based assessment (Page 2005). Modern changes to the landscape meant that positioning the trenches accurately was difficult. A hand-held Global Positioning System (GPS) was used to position the trenches as close to the chosen locations as possible, however, in the event this was accurate in only three of the five cases. On site constraints also influenced the final trench locations, but the results of the evaluation have not been compromised as all five trenches provided good information about the extent, character and, importantly, the condition of the buried archaeological resource.

Trench 1

Trench 1 was positioned to investigate the area formerly occupied by the terraced houses of Brick Row. It was positioned using the GPS and ended up being within a few metres of its intended location. However, its intended position was within what is now a wet hollow, therefore, the trench was positioned as close to the hollow as possible.

Removal of c.0.3m of grass and topsoil (100) revealed a very compacted and mixed deposit of dark brown/black clay containing c.40% building rubble, made up of brick, stone and mortar (101). This deposit was at least 1m deep at the north end of the trench where it was part filling the hollow left by the removal of Brick Row. Although very mixed, there were features visible within it, which for the most part were 'stripes' of different coloured clay and rubble. A short length of brick wall (102) was also encountered.

Wall 102 (Plate 1)

A short length of brick wall extended for c.1m across the trench: it extended beyond the west edge of the trench. The wall consisted of at least two courses of English bond brickwork capped by a layer of slate, which had been laid as a damp proof course. A small buttress of three bricks had been constructed against its north face.

The other features (Plate 2)

These features were very similar in make up, consisting of 'stripes' of varying shades of dark brown and black silty clay containing large amounts of building debris. All of these features, and wall 102, were on an east – west alignment and were, therefore, clearly not the effect of random site clearance.

Overlaying the final position of Trench 1 on early 19th century Ordnance Survey mapping of the area (Fig. 2) has shown that the trench was placed in the back yard area of the houses and that wall 102 lined up well with a wall dividing two yard. Therefore, some of the other features in Trench 1 are probably robbed walls, with the robbed out wall trenches backfilled and levelled with debris.

The results from Trench 1 showed that the houses of Brick Row would formerly have stood on the site of the wet hollow. Therefore, it seems likely that they have been removed to below foundation level leaving a hollow that has subsequently become a small wet area.

Trench 2

Trench 2 was located to investigate an area formerly occupied by a row of terraced houses, Cliff Terrace. Its final position was fairly accurate, within a few metres of its intended location, and it was, therefore, within the houses of Cliff Terrace.

Removal of 0.3m of vegetation and topsoil (200) revealed a very compacted mixed layer of dark brown/black clay and building debris (201), which overlay what appeared to be natural glacial gravels (Plate 3).

This trench was stopped at a depth of 0.5m and it was thought that it had missed the buildings. However, it now seems that it was inside the buildings, but that when they were demolished the floor layers had been removed, a situation confirmed in the other trenches. Following the demolition the debris was spread around to level and up and landscape the area.

Trench 3

Trench 3 was intended to investigate the area formerly occupied by Machynys School. However, because of the lack of evidence from Trench 2 it was decided to move the position of Trench 3 closer to Trench 2 in order to investigate a flat terrace area in the hope of uncovering either the buildings of Cliff Terrace that Trench 2 may have missed, or the school. In the event the trench was moved too far west and missed the school; it did, however, reveal significant information regarding the buildings and layout of Cliff Terrace.

The depth of the topsoil varied along the trench, with up to 0.5 at the southern end, with only 0.1m at the northern end over the remains of at least one building.

The building (Fig. 3; Plates 4, 5 and 6)

Sections of two north-south walls (306 and 307) were uncovered. One (306) had a short return to the east at its southern end, but this had been truncated during demolition or later landscaping works. The walls were of identical construction, with good stone faces and a rubble core bonded by a hard light grey mortar. They were both c.0.75m wide and survived to at least two courses high. The 3.25m space between the walls was filled by a deposit of brick rubble, clay and building debris (317).

Overlaying the final trench location onto the Ordnance Survey map (Fig. 2) the walls appear to correlate well with the walls of a back extension on one of the houses of Cliff Terrace. This makes the space between the walls, occupied by 317, the inside of the extension. The lack of a recognisable floor in this space suggests that, as with Trench 2, the houses had been demolished to below floor level and then backfilled and levelled using the debris from the buildings.

Approximately 8m to the south of wall 306 was an east west rubble filled trench (321) that ran east west across Trench 1. The trench was 0.7m wide x 4m deep and was filled by large blocks of brick rubble and hard grey mortar (305). Again, once the trench location was overlain onto the Ordnance Survey map this feature correlated well with the line of the front walls of the Cliff Terrace houses. Therefore, this appeared to be the robbed out and backfilled foundation trench for the front of the houses.

The dimensions of the excavated building are identical to those on the Ordnance Survey maps, being 25ft (8m) from front to back, with a 8ft-9ft (c.3.25m) wide back extension.

Other features

The other features recorded in this trench were at the southern end of the trench and consisted of two water mains (308 and 311), a lead encased electricity cable and a stone and brick built drain (318) that serviced water main 308. The water mains were cast iron pipes aligned east west, parallel to Cliff Terrace. Drain 318 sat on junction between water main 308 and a north-south drain 304 (Plate 7).

The services recorded were originally located in the road, presumably with branches to the houses of Cliff Terrace.

The services were overlain by a layer of ash and clinker (307), the residue from large-scale industrial processing that had apparently been laid across the southern end of the site. It may have been laid as a surface on the road of Cliff Terrace. Similarly a layer of compacted black silty clay (302), level with the top of drain 318, may also have been part of a road surface made up from industrial residues.

The evidence from Trench 3 has shown that there are substantial remains surviving of the mid-late 19th century housing at Machynys. It has shown that they were well-built and towards the end of their life at least were supplied with electricity and mains water and sewerage. Trench 3, along with Trench 2, has also shown that demolition and landscaping works was extensive and in some areas the buildings were removed to below floor and foundation levels.

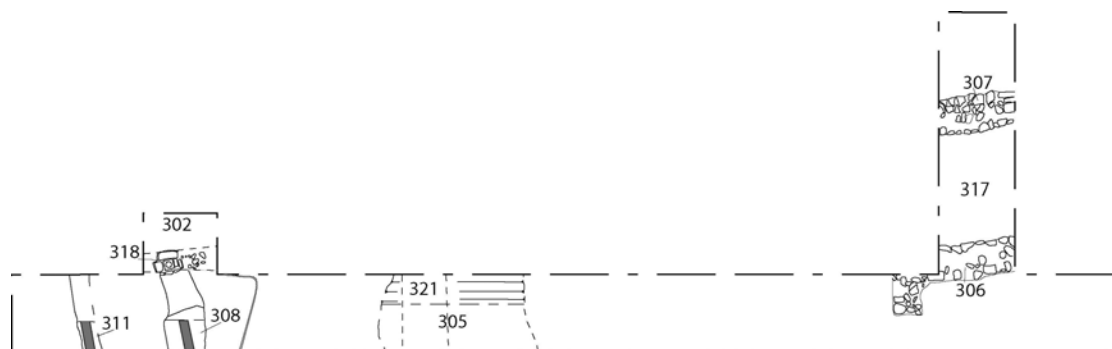


Figure 3: Plan of the main features in Trench 3

Trench 4

Trench 4 was to have been positioned across the area formerly occupied by Capel Joppa. However, the good results from Trench 3, and the fact that the Capel Joppa site was very close to the current access track being used for construction of the new housing to the south of the site, meant that a decision was made to place Trench 4 on the same prominent terrace as Trench 3 to determine the presence or otherwise of further structures.

Removal of the topsoil revealed part of a damaged tarmac road, with surviving kerbstones along the south side (404) (Plate 8). The road surface survived well in some places, but in others the surface had been damaged and the north side had been completely removed. A lead encased electricity cable ran along the line of the road; this was continuation of the cable recorded in Trench 3. A cut feature 405, which ran along the line of the road was on the same alignment as the water mains recorded in Trench 3, and it was thought that 405 represents the extension of either 308 or 311.

The only other feature was part of a stone-built structure (411) recorded in the very northern extent of the trench. It consisted of two courses and had a good face on its southeast side. Only its southeast face was exposed and it extended beyond the trench edges (Plate 9).

The form and function of this feature are unknown, but overlaying the trench on to the Ordnance Survey mapping shows it to be very close to the front of Machynys School, and it could therefore represent part of the front wall.

Trench 5

Trench 5 was excavated to investigate the area formerly occupied by the Machynys Brick Works.

Topsoil removal revealed two concrete surfaces (501 and 504) (Plate 10) at the northern and southern ends of the trench respectively. These overlay a 0.24m thick deposit of black clinker, ash and crushed coal (502), which covered the entire trench. This in turn overlay a dump of bricks (503) that appear to be filling a large void, possibly a cellar.

There was no conclusive evidence of the brickworks structure, despite the trench being placed in the right location. The amount of brick rubble (503) suggests that it had been completely demolished prior to deposit 502 being spread across the site. It is likely that 502 was the residue from the firing of the brick kilns, which was spread about the site after the demolition of the works and the landscaping of the area. The two concrete surfaces are clearly a later reuse of the site, although their function is unknown.

DISCUSSION

Industrial development at Machynys

The development of Machynys as an industrial community has been discussed during the desk-based assessment phase of this project. The following short summary is based on the assessment report.

The rapid expansion of the coal, metal processing and associated transport industries dramatically increased the number of people living and working in the Llanelli area during the 19th century. The flat lands of Llanelli Marsh around Machynys and the areas around Seaside – to the west of the Machynys – were seen as ideal building land for both factories and worker housing and by the end of the 19th century factories and housing extended as far as Machynys House.

By the time the 2nd edition Ordnance Survey map was published in the early 20th century parts of several factories, terraces of worker housing, a school, a chapel and a mission room were all present within the proposed development boundary. With the people living in the houses working in the factories at the end of the road, attending the local school and chapel it is easy to see how Machynys quickly became an almost self-sufficient community. It has been said that people living in Machynys and other similar tight-knit industrial communities in Llanelli seldom went far as they had everything they needed virtually on their doorstep (Rees 2002, 95).

The decline of Llanelli's industry was as dramatic as its rise. During the early years of the 20th century the Machynys landscape was dominated by the massive factories and the associated infrastructure of industry, but by the middle of the century the factories and the people had gone. The decline is resonant in the words of a former Machynys resident 'gone is our unique community, gone are the jobs' (McKibbin 1995, 128).

Over the last decade or so the former industrial landscape has been replaced by a more leisure-oriented space, which has little or no trace of the dynamic, full and busy landscapes of the recent past.

The results of the evaluation

The evaluation has shown that there are extensive surviving below ground remains of the 19th century Machynys community. Remains of the houses and yards in Brick Row (Trench 1) and Cliff Terrace (Trench 3) survive in varying condition, with some structures removed to below floor (see Trench 2) and foundation level and others surviving as wall lines. Remains of Machynys School also survived (Trench 4). Evidence for the water and electricity supplies for Cliff Terrace were recorded running along the line of the road in front of the houses. Part of the road itself survived in Trench 4.

Surprisingly there were very few artefacts recovered, especially given the fact that Trenches 1, 2 and 3 were investigating houses and gardens that were occupied until the 1960s.

The demolition and landscaping have removed substantial amounts of archaeological deposits, but enough appeared to survive to suggest that further excavation may reveal significant information about the history and development of Machynys and the people that lived and worked there.

CONCLUSIONS

The evaluation revealed that below ground archaeological structures and deposits survived across most of the Machynys site, although in places they had been completely removed. Where present, they were close to the current ground surface and are, therefore, vulnerable to development.

The remains might be a constraint on development and some form of mitigation may be required. The Local Planning Authority's archaeological advisor will decide on the level of any mitigation. However, this could include excavation, survey and a watching brief.

Whilst possibly a constraint against development, the surviving remains could also provide an opportunity to involve the Llanelli community in investigating the lives of the workforce behind the expansion and development of Llanelli.

PHOTOGRAPHS



Plate 1: Wall 102. view to south.



Plate 2: general view north along Trench 1 showing wall 102 and other deposits.



Plate 3: General view west along Trench 2.



Plate 4: Detail of Wall 306.



Plate 5: Detail of wall 307.



Plate 6: Walls 306 and 307 marking the former back extension of one of the Cliff Terrace houses.



Plate 7: Detail of water main 308 and drain 318.



Plate 8: Detail of road and kerb of Cliff Terrace.



Plate 9: Wall 411, part of Machynys School.



Plate 10: View south along Trench 5 showing concrete surfaces 501 and 504.
Brick rubble 503 is visible in the centre.

SOURCES

Published sources

McKibbin E 1995 'Machynys – a vanished village'. In J Edwards (Ed.) 1995, p124-128.

Rees A 2002 'New Dock, Llanelli: the changing landscape'. In the *Carmarthenshire Antiquary*, vol. XXXVIII.

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