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MONTGOMERY THERMOSTATS POWYS

Assessment Report

Montgomery Thermostats,
Montgomery
Powys

Archaeological Assessment Report

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The archaeological survey was undertaken by Matt Town and Neil Wearing, and documentary research by Jo Bell. The metal detector survey was undertaken by David Kiersek, and Matt Hepworth (Lune Valley Metal Detecting Society), the finds analysis was by Chris Howard-Davis, and the vista analysis was by Richard Newman. The report was compiled by Matt Town, Jo Bell, Chris Howard-Davis and Richard Newman, and was edited by Jamie Quartermaine and Rachel Newman. The project was managed by Jamie Quartermaine.

SUMMARY

This report describes the findings of an archaeological survey and research undertaken for a proposed development site centred on SO 2230 9725, immediately north of the walled town of Montgomery or Trefaldwyn, Montgomeryshire. This work was undertaken on behalf of the Burgess Partnership Limited for the Welsh Development Agency, who propose to build on the land and were required to commission archaeological evaluation in accordance with planning regulations.

An archaeological survey, including topographic survey and photographic recording, was undertaken in December 1999. Documentary research was also undertaken, to examine maps, aerial photographs and other documents which might elucidate past developments on the site. A metal detection survey was undertaken in January 2000, and vista analysis of the visual impact of the proposed development has been undertaken on the basis of computer enhanced photographs of the study area incorporating a model of the proposed new-build.

The survey found traces of former agricultural use, in the form of ridge and furrow plough patterns and former field boundaries which predate the nineteenth century. The field may also have been one of those on which the Royalist battle line was drawn up during the Battle of Montgomery in 1644, and the metal detector survey identified a series of musket balls, which may be an indication that the battle or skirmishing took place at the site.

The surface remains relate to medieval/post-medieval agriculture activity and are of only local importance; however, the presence of musket balls, in conjunction with documentary evidence locating the Royalist lines of the Battle of Montgomery across the study area, would indicate that this was a potentially significant part of the wider battlefield landscape, and as such is of regional importance.

On the basis of the vista analysis, it would appear that the proposed development will impair the visual outlook from selected viewpoints, notably from Montgomery Castle and the town. The development site lies in a low-lying valley overlooked by scheduled monuments at Montgomery, Hen Domen and Fridd Falwyn, and by the Offa's Dyke National Trail and the factory buildings will have a moderate visual impact in an area that is not significantly affected by commercial development.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 In December 1999 Lancaster University Archaeological Unit (LUAU) was commissioned by the Burgess Partnership Ltd, acting for the Welsh Development Agency, to undertake the archaeological evaluation of a field centred on SO 2230 9725.
- 1.1.2 Archaeological survey was recommended by the curatorial section of the Clwyd-Powys Archaeological Trust (CPAT) for several reasons. The development site lies within 70m of both the Montgomery Conservation Area and the town wall, which is a scheduled monument. The site is in the Vale of Montgomery, an area included by Cadw in its register of *Landscapes of Outstanding Historic Interest in Wales* (CPAT 1999, 4.1) and Offa's Dyke runs just over 1km to the east. The important monuments whose context will be affected by the proposed development include Hen Domen, Ffridd Faldwyn and Montgomery Castle. In addition, it was considered that the development site was potentially part of the battlefield on which the Battle of Montgomery was fought during the Civil Wars.
- 1.1.3 **Project Aims:** the primary objective of the study, as defined within the project brief, prepared by the Curatorial Section of Clwyd-Powys Archaeological Trust (CPAT), was to 'locate...and describe all archaeological features which may be present within the development area'. The general objectives were as follows:
- to undertake an historical and archaeological desk-based assessment of the site and to assess the historic potential;
 - to undertake a landscape survey of the site to record the extant surface features;
 - to undertake a metal artefact detection survey of a sample of the total study area to establish the presence or absence of artefacts relating to the Battle of Montgomery;
 - to undertake an Historic Landscape Impact Assessment to investigate the extent of the visual impact that the proposed development will have upon the landscape in general and from key historic sites;
- 1.1.4 The survey undertaken included both physical and documentary elements. The physical survey recorded the extant earthworks using an Electronic Distance Meter (EDM), and the maps were recorded as an interpretive hachure survey and also as a contoured surface. At the same time, a documentary survey was carried out at archives including the Powys County Record Office and the National Library of Wales. This drew on primary documents, such as historic maps and plans, land transactions and aerial photographs, as well as secondary (published) documentation, to assess the importance and archaeological potential of the site. A programme of metal detection by the Lune Valley Metal Detecting Society was undertaken in January 2000, which was undertaken at a later date to the rest of the surveys, due to adverse conditions before Christmas.
- 1.1.5 This report outlines the methodology employed in the assessment, and presents the results. The results of physical, documentary and metal detector surveys and the

vista analysis have been taken into account in our assessment of the archaeological potential.

2. METHODOLOGY

2.1 DOCUMENTARY SURVEY

- 2.1.1 Several archives were visited, in accordance with the brief supplied by CPAT and with normal working practice. These archives included:
- 2.1.2 ***Sites and Monuments Record (SMR)***: the Clwyd-Powys Sites and Monuments Record is a database of archaeological information which aims to include all known archaeological sites in the county, and is held at CPAT in Welshpool. A brief record including grid reference and description was printed out for each site within approximately 500m of the study area. Black and white and colour aerial photographs ranging in date from 1972 to 1994 were consulted. Archaeological reports and a number of secondary sources were also scanned for information. A request was made for the Powis estate plans stored at CPAT, as requested in the project brief (CPAT 1999, 6.3), but no relevant plans were available.
- 2.1.3 ***County Records Office***: the County Records Office at Llandrindod Wells was visited mainly for its historic maps, including the Tithe Map for Montgomery parish and Ordnance Survey maps dating from the late nineteenth century onwards. A search was made for relevant historic documentation, using the card index and handlists, and drawing on the knowledge of archivists. A number of secondary sources and archaeological or historical journals were also consulted.
- 2.1.4 ***The National Library of Wales***: the National Library of Wales was consulted mainly for the holdings in the Powis estate collection. In the Manuscripts room, the collection was searched by the use of schedules (catalogues) and card indices, particularly the schedule of maps and plans belonging to the collection. A broader search was made of the extensive computer catalogue, using combinations of search words such as POWIS, PLAN, MONTGOMERY and VERLEN or VERLON (the area in which the field falls). As a result several documents concerning land transactions in the seventeenth and nineteenth centuries were studied. In the maps room, a further search was made of the card index and computer catalogues dedicated to maps alone.

2.2 LANDSCAPE SURVEY

- 2.2.1 An LUAU Level 4 survey, which is equivalent to RCHM(E) level 3, with the addition of contour detail, was undertaken. The survey involved the detailed mapping of all surface features within the study area and recorded all extant earthworks, particularly those relating to the field system and cultivation evidence.
- 2.2.2 Survey control was established over the site by closed traverse and internally was accurate to +/- 15mm; the control network was located with respect to field boundaries. It was located onto the Ordnance Survey (OS) National Grid by the use of Global Positioning Survey (GPS), which located to an accuracy of +/- 0.25m. The heights were tied into OS datum.
- 2.2.3 The surface features were surveyed by EDM tacheometry using a total station linked to a data logger, the accuracy of detail generation being appropriate for a 1:500 output. The digital data were transferred onto a portable computer for manipulation and transfer to other digital or hard media; film plots were output via a plotter. The

archaeological detail was drawn up in the field as a dimensioned drawing on the plots with respect to survey markers. Most topographic detail was also surveyed, particularly if it was deemed to be archaeologically significant or was in the vicinity of archaeological features.

- 2.2.4 The survey data were superimposed with the base topography digitised in from a 1:2,500 map base in order to provide a topographic context for the site beyond the limits of the study area; the mapping was then created within a CAD system (AutoCAD 14). A contour survey was created using the primary survey data and this was superimposed upon the interpretative hachure survey.
- 2.2.5 In conjunction with the archaeological survey, a photographic black and white and colour print archive was generated, which recorded significant features and the general landscape context. These photographs provided the basis for the vista analysis and were taken from selected viewpoints, as defined in the project brief. In addition a 360° panoramic view was taken using 35mm format from a position corresponding with the highest point of the High Bay Warehouse.

2.3 METAL ARTEFACT DETECTION SURVEY

- 2.3.1 The metal artefact survey was undertaken by David Kierzek and Matt Hepworth of the Lune Valley Metal Detecting Society in January 2000. It involved the systematic investigation, along 2m transects, of an area of 30m x 200m within the centre of the field (Fig 8). The metal detector machines are of modern design and, as standard practice, were adjusted so as to eliminate background noise. The position of each artefact found was located in three-dimensions using Global Positioning System (GPS) techniques.

2.4 HISTORIC LANDSCAPE IMPACT ASSESSMENT

- 2.4.1 The proposed study area is within the Montgomery Historic Landscape Character Area (HLCA1070), comprising the key components of a) the town, its defences and the castle; b) the former open-field system; c) the Hen-Domen Motte and Bailey; d) the Montgomery Battlefield; e) communication routes; f) background sites. The project assessed the impact of the proposed development within the context of the overall landscape. This required an assessment of the impact upon the visual setting of key elements of that landscape.
- 2.4.2 **Vista Analysis:** photography was undertaken using medium format, and 35mm colour print taken from key locations looking in the direction of the development site. The photography was taken with standard 50mm, 70mm zoom and 35mm-wide angle lenses, in order to assess the visual impact of the development. The photographs were taken from the following locations as defined in the brief, and the positions of each of the view-points were precisely recorded in three dimensions using GPS equipment:
- looking from the north wall of Montgomery Castle (SO 2215 9685);
 - looking from the top of the town wall defences (SO 2233 9702);
 - looking from the B4385 (SO 2203 9730);
 - looking from the former position of Arthur's Gate (SO 2225 9698);

- looking from the Hen Domen ridge (SO 2186 9813);
- looking from the Montgomery Battlefield (SO 2256 9790);
- looking from the B4388 (SO 2240 9826);
- looking from Offa's Dyke (SO 2301 0015).

2.4.3 An outline computer model was provided by the client of the structural elements of the proposed development within a three-dimensional CAD system (AutoCAD14), at a 1:1 scale and this was then located accurately with respect to the Ordnance Survey National Grid. The view-point of the model was defined by the three dimensioned coordinates obtained by GPS during the photographic survey. The perspective view of the model was then superimposed and appropriately scaled with the relevant scanned photograph using combined AutoCAD14 and Photoshop software. The process was repeated for all other viewpoints, and the results of this are presented below.

2.4.4 **Outward Vista:** the brief required the creation of an outward view-shed analysis, which was implemented by viewing Ordnance Survey three dimensioned modelled mesh data for the Montgomery environs from a view-point corresponding to the top of the roof line of the proposed High Bay Warehouse. Panoramic photographic views were taken from a cherry picker set at the appropriate height (10.5m above ground) and position, and from there a 360° panoramic montage of photographs was taken. The photographs were merged using Photoshop software to create the final montage, and the results are presented below (Fig 10).

2.4.5 **Impact Assessment:** the results of the surface survey, desk-based study and metal detector survey, has been used to make a detailed, characterised assessment of the archaeological significance of the archaeological resource affected. Assessment of the development proposals was based on the criteria of importance, 'representativeness', group-value, condition, documentation, and associations; and examined the extent to which the overall landscape will be affected by the loss of those selected elements identified within the study area.

2.4.6 The assessment examined, on the basis of the vista analysis, the extent to which the introduction of the proposed development will visually impair the overall historic landscape, and also the setting of the individual elements of that landscape, such as the battlefield, the town walls, the motte and bailey, and the castle.

2.4.7 The overall impact on the historic landscape, by virtue of both the loss of selected elements, and the insertion of an alien element is defined in terms of the categories: Very Severe, Severe, Moderate, Low Impact or No Impact.

2.5 ARCHIVE

2.5.1 The results of the survey and research, once completed, will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of archaeological projects*, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly quantified, ordered, and indexed project archive in an appropriate repository is considered an essential and

integral element of all archaeological projects by the Institute of Field Archaeologists in that organisation's Code of Conduct.

- 2.5.2 The textual archive will be provided both as a printed document and on computer disks. The data will be transferred in a compatible format for import into the overall survey report. As well as hard copy drawings, the graphical data can also be supplied in digital form, formatted and layered for use in an industry-standard CAD format.

3. HISTORICAL BACKGROUND

3.1 LANDSCAPE CONTEXT

- 3.1.1 The site lies close to the Wales/England border in the Vale of Montgomery, a natural basin at the confluence of the rivers Severn and Camlad. The area includes fertile river terraces overlooked by a number of ridges or platforms, whose strategic and military potential was exploited from an early date. Although the town of Montgomery or Trefaldwyn is essentially a medieval plantation, it was also a strategic site in Iron Age, Roman and early medieval times (Haslam 1992, 164). It is the current focal point of a rich and varied archaeological landscape, and has been called ‘*the most important historic settlement in northern Powys,*’ and one which ‘*requires an in-depth topographical and historical survey*’ (Silvester 1992, 137).
- 3.1.2 The present study incorporates the principle that the landscape context is crucial to the planning implications for a site, and this is endorsed by Dyer: ‘*one realises why it is necessary for planning purposes to emphasise the “historic cores”, but in those areas where the majority of people lived in irregular and dispersed settlement outside the “historic cores”, it is clearly desirable to include in any study all the surroundings*’ (Dyer 1997, 167).
- 3.1.3 It is clear that the history and archaeology of the study area have been characterised by conflict; the most outstanding of the monuments are hillforts, castles and other defensive sites, including Offa's Dyke, itself a territorial boundary. Several of these sites have seen multi-period use, as the defensive possibilities of prominent sites have been re-used by successive generations of invaders or defenders. More recently the area was the scene of the Civil War battlefield which utilised the gentle sloping ground to the north of the town and castle.

3.2 PREHISTORIC AND ROMAN PERIODS

- 3.2.1 The earliest evidence of human activity near the study area is of the Neolithic period. Ffridd Faldwyn, a substantial hillfort which lies c 0.5km south-west of the study area at SO 217 969, was in use by the Neolithic period (Silvester 1992, 136). Archaeological evidence is limited to stone artefacts, however, little is known of the population. Nevertheless the important stone source at Cwm Mawr, near the Border east of Montgomery, is nearby; it was used in the late Neolithic for battle-axes, axe-hammers and also the megaliths which were erected in stone circles in Powys (Burnham 1995, 8).
- 3.2.2 Ffridd Faldwyn remained in use through the Bronze Age, Iron Age and into the Roman period (Burnham 1995, 120); Town Hill, c 1km south of Montgomery, carries earthworks which may also be of Iron Age date (Silvester 1992, 136). In the Roman period, most of Clwyd and Powys remained under military rule, forts at Castell Collen, Caersws and Forden Gaer, near Montgomery, being in use during this period (Burnham 1995, 77). Enclosed farmsteads of late prehistoric and Roman date have been identified within a 3km radius of the town (Silvester 1992, 136). Other remnants of the prehistoric and Roman periods in the landscape are the roads and trackways, including that underlying the current minor road which forms the study area's eastern boundary.

3.3 MEDIEVAL

- 3.3.1 The post-Roman period is relatively little known, and it has been noted that '*for archaeologists working on early medieval settlements Wales can appear to be particularly intractable*' (Edwards and Lane 1988, 3). The economy remained agricultural, with farming probably centred around small curvilinear or rectilinear enclosures, as in South-West Wales, or 'small sub-rectangular structures, often grouped to form conjoined rows divided by cross walls' (*op cit*, 9).
- 3.3.2 The Norman Conquest resulted in the construction of numerous castles and there are 27 small strongholds in the Vale of Montgomery alone. The first site fortified by the Normans was at Hen Domen, sometimes called Old Montgomery, a site where traces of '*possible sub-Roman buildings*' and pre-Norman agriculture suggest earlier occupation (Burnham 1995, 149). Its motte and bailey castle was built between 1071-1086, at a focus of routes including the north/south route along the Severn and the east-west route along the Camlad. It was held by the de Montgomery and de Boulders families before reverting to the crown in 1207. In 1223 Henry III ordered the construction of the stone castle at 'New' Montgomery and the creation of the planted town or bastide associated with it. Today the characteristic regular street plan of a bastide is visible only in the area around the church and market (Silvester 1992, 136).
- 3.3.3 The study area is likely to have been within the agricultural holdings that clustered around the town. It may have been amongst the lands newly farmed by Norman settlers, who often established farms on '*virgin lands or lands which had hitherto not been intensively or permanently cultivated*' (Davies 1987, 98). Throughout the Middle Ages the town of Montgomery remained a military base, being used, for instance, by Edward I as a defensive site from which to strike at the Welsh leaders Llewelyn ap Gruffudd, and Madog ap Llywelyn, who were supremely powerful in the Montgomery area. The castle was burned by the Welsh in 1231, but was regained at the treaty of Woodstock in 1247. Nothing is known of the study area specifically in this period, or indeed throughout the early modern period (c1500-1750) with the exception of the 1640s, for which we have some partial information (Section 3.4.1).

3.4 POST-MEDIEVAL

- 3.4.1 ***Battle of Montgomery:*** the period of greatest archaeological significance for the study area is perhaps the Civil Wars of the mid seventeenth century. Indeed it was probably part of the battlefield on which was fought the largest engagement of the war in Wales (Gaunt 1991, 49), the battle of Montgomery was fought on 18th September 1644. Up to this date Montgomery Castle, held by Lord Chirbury, had remained neutral in the conflict; however, the castle was taken by Parliamentary forces in early September and was then besieged by Royalists, who threw up defensive earthworks and cut trenches to the west of the castle. In order to relieve the Parliamentary garrison a large parliamentary force converged on Montgomery, and the two forces met on the gentle sloping ground to the north of the town and castle. The Royalist forces were already encamped below the town, possibly at cSO 22309735 (Walters and Hunnisett 1995, 2), and the Parliamentary forces were forced to take position on the lower ground to the north.

- 3.4.2 On 18th September 1644, the Royalists formed a battle line below and to the north - east of the town, with a Parliamentary force ranged below them. The Royalist line has been estimated as falling roughly between SO 2309 9659, and SO 2188 9772 and the Parliamentary line between SO 2350 9709 and SO 2209 9818 (Walters and Hunnisett 1995, 4). This places the study area within the Royalist line (Fig 9). Despite their disadvantage, the Parliamentarians won a convincing victory.
- 3.4.3 With this remarkable exception, the study area seems to have continued as undisturbed arable land, in a landscape '*little changed since the seventeenth century except for enclosure*' (Walters and Hunnisett 1995, 4). After the Restoration of Charles II in 1660, the local economy saw a modest expansion in non-agricultural production, notably of woollen cloth. The weavers of Montgomery specialised in flannel (Jenkins 1987, 120), but it was not until the end of the eighteenth century that their production could be described as properly industrial (Rees 1975, 220). In the late eighteenth or early nineteenth century, the road, now called the B4388, which forms the western boundary of the study area, was built or rebuilt by a turnpike trust, and a milestone was erected, which remains *in situ*.
- 3.4.4 Throughout the later eighteenth, nineteenth and twentieth centuries the study area has been in use as agricultural land. Photographs and historic maps show that it has been used for both arable and pastoral farming, and in recent years it has seen the construction of a pond and the laying of a pipeline, both of which will have disturbed subsoil deposits, including any archaeological strata.

4. RESULTS

4.1 DOCUMENTARY SURVEY

4.1.1 **Sites and Monuments Record (SMR):** six SMR records were identified in the vicinity of the study area; of these, only one was directly relevant to it. Aerial photographs included the following:

- 82-04-0035 A black and white oblique photograph of 6 December 1982, showing only a small strip of the study area with no archaeological features visible;
- 82-C-0256 A colour oblique slide, showing only a corner of the site and providing no archaeological information;
- 82--0272 A hazy colour oblique slide, showing ridge and furrow as mentioned below in 94-C-0305;
- 84-MB-0555 A black and white oblique photograph of 1 August 1984, was marked as showing a 'possible enclosure' at SO 222 973. An amorphous dark blob, roughly oval, is shown in the large field immediately north of the study area on the opposite side of the cross-roads, with a linear feature running north towards it from the road. In the study area, a light scar running north-east/south-west marks the modern pipeline (Site 4), with a circular pale feature to its north which marks the present manhole. No other features were seen;
- 94-C-0305 A colour oblique slide. Ridge and furrow is faintly visible at the south-east end of the enclosure, running roughly south-east to north-west and occupying the southern third of the field (Site 1). Defining the northern edge of the ridge and furrow is a faint, thin raised earthwork which represents a defunct field boundary (Site 5). To its north is a further thin earthwork, curving slightly to the west; north of this are two further linear marks (Site 8 and 7). The northernmost, running close to the road, runs parallel to similar earthworks in neighbouring fields (10) and is a relict element of a former field system (Site 8). A further related field boundary was observed in the field to the north-east of the study area (Site 11);
- 94-C-0306 An infra-red oblique slide, showing exactly the same marks and earthworks as the previous slide;
- 94-C-0307 A colour oblique slide, showing identical information to the previous two slides;
- 94-C-0308 An infra-red oblique slide, again showing identical information to previous slides;
- 94-C-0309 An infra-red oblique slide, repeating the same information;
- Two further slides believed to show the study area, namely 82-C-0257 and 82-C-0261, were found to be missing from the archive.

4.1.2 Information from archaeological reports and secondary sources, consulted at the SMR office, has been partly incorporated in the historical background (*Section 3*). Reports of research in and around the study area suggest that the Battle of Montgomery touched on the study area, and consequently that it may include buried

- remains of Civil War date. One report (Walters and Hunnisett 1995) mentions possible earthworks of Civil War date near the study area, at 'SO 2230 97735'[sic] (Site 09). If this reference means SO 2230 9735, then the earthworks may lie within the present study area, but may have been confused with the agricultural earthworks.
- 4.1.3 A summary of survey and metal detection undertaken near the study area at *c* SO 2200 9678 concluded that the '*main battlefield array [of the Battle of Montgomery] was successfully located*' (Walters 1995). The surveyors added that '*the potential for other military artefacts is considered to be very high based on the well-preserved artefact scatter recovered*', and identified considerable potential for more intensive survey near the battle line.
- 4.1.4 **County Records Office:** the record office was consulted for maps for the regression analysis, but no other primary documentation was found there that was of relevance to the study area. Information from secondary sources and archaeological or historical journals has been incorporated into the historical background (*Section 3.2*).
- 4.1.5 **National Library of Wales:** the Powis collection was consulted but this unfortunately provided no further information, despite a rapid but extensive survey of the six-volume catalogue. Although the collection includes numerous maps and plans, none are thought to include the study area. No other collections were located which might relate to the study area.
- 4.1.6 Land transactions which might touch on the study area were consulted, but gave no information that could be of use to the present study (such as land use, the location of boundaries or the nature of any structures in the study area). The documents consulted were D26/35/1, an 1813 'mortgage of land formerly on Verlon Common to Joseph Weaver' and D23/44/8, a 1797 'exchange of Verlon Meadow'.
- 4.1.7 Documents not consulted because they were judged as not relevant included D29/4/1-2, a 1797 lease and release of land at Sarkley; and D23/42/2, a 1771 exchange of land north of Upper Verlon Meadow. A map derived from the tithe map, M168/26, was not consulted as the tithe map had already been studied at the County Record Office.
- 4.1.8 **Royal Commission on Ancient and Historic Monuments in Wales (RCAHMW):** several maps and aerial photographs were consulted; the maps are described; below in the regression analysis. Evidence from secondary sources consulted at RCAHMW is included in the historical background (*Section 3*). Aerial photographs seen included:
- 3193 106G/UK 1698 A black and white vertical photograph taken on 27 August 1996. The study area is shown, apparently under pasture. No marks are visible, and no indications of archaeological features in the area.
 - 3194 106G/UK 1698 A further black and white vertical photograph taken on the same date shows the study area. No marks are visible within the study area, although an L-shaped earthwork or mark is visible in the neighbouring field to the north-west, and possible ridge and furrow in fields to the south;
 - 72/333/1031 A black and white vertical photograph of 22 August 1972 shows the study area clearly, and the L-shaped boundary in the neighbouring field is just visible in pasture. The study area is apparently under crop as the tracks of a harvester are visible, and no marks are apparent;

- 72/333/1059 A further black and white vertical photograph of the same date shows the study area on the edge of the photograph. No marks are visible.
- 4.1.9 Ordnance Survey (OS) record cards, a precursor to the SMR system of archaeological recording, were checked. These provided the following information. A 'Roman' road (RRX73) is marked on the route of the present north-west/south-east route which forms the northern boundary of the study area. It is suggested that this was part of a route connecting Lydham Fort, Forden Gaer, Bryn Penarth fortlet, and finally Dolgellau.
- 4.1.10 OS card 15 mentions 'Old field boundaries' at SO 2229 9733 (Site 12). They are described summarily as '*rectangular enclosure, traces of bank*' defining a '*supposed enclosure*' on a west-facing slope.

4.2 MAP REGRESSION ANALYSIS

- 4.2.1 Maps consulted at the County Records Office and RCAHMW are listed here in chronological order, with a brief discussion of evidence gathered from each.
- Speed's 1605 schematic map of Montgomery does not include the study area.
 - A 1785 survey of Powis Estates (Fig 2) shows the study area as part of Verlon Common: the present boundaries are not in place. 'Lower Verlon Piece' is named as an area rented by C G Humphreys and given to pasture. This may be the enclosure named as 'Hither Verlon Piece' named in the tithe award, below, which is demonstrably the study area.
 - An 1817 map at a scale of 2" to 1 mile is the Ordnance Survey surveyor's drawing of the area (ref 200TL 1816). It was seen as a dark photocopy which was not of reproducible standard, but on which the study area could be seen as a single undivided field south of the road, its boundaries being shown as they are at present. No features are marked within it, and there is no indication of land-use in the field. No milestone is shown at the roadside in the western boundary of the field, as it is on later maps.
- 4.2.2 There was no enclosure award for Montgomery parish, in which the study area falls. There was no such award at the National Library either, and it seems that no such award was made. Enclosure may have been privately agreed before 1817, since the 1817 map (above) suggests that enclosure boundaries were then in place which have remained unchanged since.
- 4.2.3 The 1839 tithe map and apportionment (Fig 3) were drawn up at a time when dues to the church, hitherto nominally payable as goods in kind, were formally commuted to cash payment. The tithe map is a plan of the area (usually a parish or township) with fields or enclosures numbered, and the apportionment describes the ownership and use of each enclosure. In this case, the study area is shown with its boundaries, like those of neighbouring fields, exactly as at present. The study area field is numbered 204. It is identified as the property of the Earl of Powis, but was farmed by Edward Weaver who was then using it as meadow; the field is named as 'Hither Verlon Piece'. Neighbouring fields were also in use as meadow land, with the exception of the field to the south, Verlon Close, which was used as pasture. In conjunction with the 1785 survey above, the absence of an enclosure award, and an 1813 document seen at the National Library (*Section 4.1.6*), which refers to 'land formerly on Verlon

Common' in the hands of a Joseph Weaver, the tithe map suggests that the Weaver family had recently enclosed a part of the common by private agreement, bypassing the need for a Parliamentary enclosure award.

- 4.2.4 The 1865 first edition Ordnance Survey map at a scale of 1" to 1 mile (sheet 60SE) shows 'Verlen' to the west of the study area, but no enclosures are shown at this scale.
- 4.2.5 The 1889 first edition Ordnance Survey map (Fig 4) at a scale of 6" to 1 mile shows the study area as on the previous map, but with the north/south route marked as Forden Road. The milestone on the road immediately west of the study area (the current B4388) is shown in place. The north and east boundaries of the study area are shown to have trees on the boundary line.
- 4.2.6 The revised edition Ordnance Survey map at a scale of 6" to 1 mile, incorporating information up to 1948, shows the boundaries of the study area unchanged from previous maps, and no evidence of features or indication of topography within the boundaries.

4.3 LANDSCAPE SURVEY

- 4.3.1 The survey identified a number of earthworks within the survey area, predominantly broad ridge and furrow. The main concentration of ridge and furrow consists of 11 eleven well-defined ridges (Site 1) running north-west/south-east, in the south-eastern half of the field. These ridges were most prominent in the eastern corner of the field, where they were c6m apart, and 0.75m high, becoming broader and shallower towards the south-west (12m wide and 0.3m high). As expected, they appear to predate the post-medieval field lines, as defined by hedgerows and the new road, which visibly truncate the earthworks (the fields were probably enclosed sometime before 1817 (*Section 4.2.2*). A boggy pond (Site 2) has been cut into the eastern corner of the field through the ridge and furrow, with soil upcast mounds, visible to the north-east and south-west of it, obscuring the furrows. The pond is roughly 15m across, and abuts the field boundary to the south-east, post-dating it. A possible land drain (Site 3) runs off north-north-west from the pond for 110m, to drain the boggy areas around the north-west of the pond. This is visible as a low narrow linear depression (c 1.5m wide and 0.7m deep), which also cuts the ridge and furrow.
- 4.3.2 A modern pipe-line (Site 4), measuring 2.5m wide by 75m in length, runs east/west across the mid-point of the survey area, bisecting the north-western ends of the ridge and furrow field, and the afore-mentioned land-drain. This has a concrete cap approximately mid-way along its length and was probably a waste-water pipe. The ridge and furrow abuts a headland (Site 5) to the north-west, visible as two 'S'-shaped linear ridges running east/west, approximately 6m wide and 1m high. Approximately 15m to the north is a further land-drain (Site 6) (measuring c2m wide, 70m long and 0.5m deep) also running in the same direction. This is a curvilinear depression extending from the hedgerow down to the south-west corner of the field. It appears to cut a further area of cultivation (Site 7), visible abutting its northern side as a series of shallow ridge and furrow earthworks running for 15m northwards up to the hedgeline; these were very faint and only at most 0.3m high. This second area of ridge and furrow probably extended up to join the central headland originally, though it is not now visible in the area between the two features.

- 4.3.3 Two steep parallel north/south lynchets (Site 8) form the western boundary of this last area of ridge and furrow. These are both west facing; the easternmost lynchet measures c45m in length and 1.2m in height, while the western lynchet is the same length but shallower at 0.6m. These may mark further cultivation marks, though the westernmost lynchet is parallel with the road, and this suggests that this marks the eastern boundary of a hollow-way, now formalised as the road. Cultivation marks were also noted in the field on the opposite side of the road (to the west) which seem to correspond to these lynchets. This would suggest that they were originally part of a field of furrows with a central hollow-way, which is parallel to the line of a relict boundary into the field to the west of the study area (Site 10). No further potential hollow-ways were positively identified.

4.4 METAL DETECTOR SURVEY

- 4.4.1 **Introduction:** the programme of metal detection survey identified a broad range of artefacts which were located using GPS equipment, and their distribution is shown in Figure 8. The assessment of the resultant assemblage is presented below.
- 4.4.2 **Artefact Analysis:** a total of 39 fragments of artefacts was recovered in the course of metal detecting activity. As a direct result of the means of recovery, finds were restricted to those of copper alloy, iron, lead and pewter. Many simple artefacts of iron and lead are difficult to date with precision and, in the absence of corroborative dating from ceramics, they can only be placed within a broad date-range, the post-medieval and modern periods (approximately the late sixteenth to twentieth centuries). Most of the finds were in fair condition, and survived complete or in large fragments, suggesting that they had not been significantly disturbed since their original deposition.
- 4.4.3 None of the finds can be definitively dated to the seventeenth century, or more specifically to the Civil Wars. There are, however, six examples of cast spherical shot (find nos 6, 14, 21, 24, 26(2)). Five are around 11mm in diameter, the sixth is c 15mm but as it has been flattened to an hemisphere, may originally have been smaller. All show the seams resulting from the use of a two-piece mould, and trimmed casting sprues; all are flattened from firing or from impact. All would fall within the size range suggested by Courtney (1993, 159) for pistol shot. This might provide adequate evidence for the site of the Civil War battle and indeed the number of pieces of shot found is comparable with that from other contemporary battlefields (Dr R Newman pers comm) but not with the relatively large numbers from siege sites such as Beeston Castle (Ellis 1993) or Sandal Castle (Mayes and Butler, 1983). It must, however, be borne in mind that gun technology remained essentially unchanged into the nineteenth century and thus the shot might have accumulated over a more prolonged period, if, for instance, the land had been used as a practice range, or for hunting.
- 4.4.4 A small horse-shoe of post-medieval form (find no 5) might also be linked with the battle site, as it appears to have a 'keyhole'-shaped internal profile, but again, could equally be significantly later in date. Although the type was introduced in the seventeenth century, it persisted well into the eighteenth, and the shoe also incorporates a toe clip, regarded as a late modification. A large and roughly made lead washer over 78mm in diameter (find no 15) must have been used within something like an axle assemblage, and might thus raise the possibility that it was from a gun carriage, although this must remain speculative.

- 4.4.5 Very few objects can be confidently attributed to the eighteenth or early nineteenth centuries. A simple cast, square shoe-buckle (find no 8) is of eighteenth century date. A plain wool seal (find no 16) and a very worn token (find no 20) could be of similar date, or slightly later.
- 4.4.6 The majority of the dated finds derive from the later part of the nineteenth century. They include a penny of Victoria (1861) (find no 10) and a five centime piece of Napoleon III (18[]5; third digit removed by small drilled suspension hole, presumably for fixing on a watch-chain; Napoleon III reigned from 1848-1870) (find no 18). There was also an embossed badge in the form of a five-pointed star bearing the date of Victoria's Golden Jubilee (1887) (find no 17). The group includes an insubstantial belt fitting (find no 25), decorated with an embossed gilded cricketer with bat and ball, a decorative (gas?) lamp fitting, in the form of three Nereids bearing flaming torches, and intended to support a glass lampshade (find no 2), and a small part of a cast statuette of a rearing horse (find no 1). Other finds which cannot be dated with confidence include lead pipe (find no 7); iron door furniture (find nos 22, 28, and 32); and a pewter door knob (find no 33). Other finds are undiagnostic (*Appendix 4*).
- 4.4.7 **Conclusion:** although no definite conclusion can be drawn from the finds assemblage, there appears to be sufficient cumulative evidence to support the possibility that the site examined was part of the Civil War battle site.

4.5 VISTA ANALYSIS

- 4.5.1 The purpose of the vista analysis was to examine the visual impact of the proposed new development from a number of pre-defined points. Further its overall visual impact on historic setting and on historic landscape character is considered.
- 4.5.2 **View 1:** view 1 is from Montgomery Castle (SO 2215 9685). The viewpoint is an excellent situation for appreciating the battlefield site of the Battle of Montgomery, and is historically linked to it as it formed part of the Parliamentary defences. The site is plainly visible between recent factory development and recent housing. The open character of the view will be partially compromised by the erection of the proposed structure, but this intrusion will be no worse than the intrusions already made by modern development to either side of it. The open character of the view has, then, already been recently compromised, and the open character of the landscape is only intact to the north-east of the line of new houses at SO2252 9720. The proposed structure seems to be within the vicinity of the Royalist lines during the Civil War Battle of Montgomery. At present, view 1 encapsulates a good vista of the battlefield and it is possible to gain a sense of the landscape at the time of the engagement. Whilst the erection of the proposed structure would not entirely compromise this experience, it would partially obscure the hedgeline marking the road along which the Royalist forces appear to have established their line of battle.
- 4.5.3 **View 2:** this is from the top of the Montgomery Town wall defences (SO 2233 9702). The new structure would be almost entirely screened by trees, and will not disrupt the current vista or hinder the appreciation of the landscape. The foreground of this view is already occupied by modern structures.
- 4.5.4 **View 3:** this is from the B4385 (SO 2203 9730). The middle ground of this view, where the new structure will be situated, is already dominated by recent buildings, and other than obscuring some recent housing, the impact of the development on this

vista will be minimal. This is not a good vantage point for appreciating the historic landscape in terms of field pattern and the battlefield, and the new structure will not significantly diminish the experience offered by this vista.

- 4.5.5 **View 4:** this is from the former position of Arthur's Gate (SO 2225 9698). The new build is likely to be entirely hidden behind other modern developments and trees.
- 4.5.6 **View 5:** this is from the Hen Domen Ridge (SO 2186 9813). Again the new development is likely to be largely hidden by trees and modern development. As the vista is of an urban environment in the distance, the new development will not detract from this and it does not impact upon the view of any historic features. From the viewing angle the development will appear to extend the built area.
- 4.5.7 **View 6:** this is from the official location of the Montgomery Battlefield (SO 2256 9790). The new development will be visible at the front of the middle ground view. However, it will only impact slightly upon an appreciation of an urban and primarily modern landscape in the middle ground. It will not detract from this and it does not impact upon the view of historic features such as the church and castle.
- 4.5.8 **View 7:** this is from the former turnpike road (SO 2240 9826). The same comments apply as to view 6, except the development will be at a greater distance and will be more central to the vista of the townscape.
- 4.5.9 **View 8:** this is from Offa's Dyke (SO 2301 0015). The proposed development will appear in this vista to be close to the foot of Castle Hill and will be partially hidden by trees. It will be distant and appears to blend into the backdrop of the built area and thus have no real impact upon the vista.

5. CONCLUSIONS

5.1 DOCUMENTARY AND FIELDWORK RESULTS

- 5.1.1 Fieldwork and documentary survey both encountered evidence of medieval ridge and furrow cultivation, but no further medieval or earlier features. Despite its scarcity within the area, ridge and furrow is arguably of little archaeological importance once its presence and alignment have been recorded. It is felt that the contour survey of the ridges, and their establishment within the historical context of the town, will have provided sufficient record to mitigate their destruction by the proposed factory extension.
- 5.1.2 The map regression revealed that there has been remarkably little change in the local landscape, since 1817, but the present field system was established at some stage prior to this date. The ridge and furrow reflect an earlier field system that is in part truncated by the present day boundaries and demonstrates the form and character of the pre-enclosure agricultural layout.

5.2 BATTLEFIELD

- 5.2.1 The development lies within the defined Civil War battlefield area, possibly along the line of the mustered Royalist forces. In England the major battlefields are listed on a Register and this acts as a prompt to them being material considerations within the planning process. No such register exists in Wales, but battlefields are still a material consideration. The Battle of Montgomery was not a significant battle in terms of the course of the Civil Wars, but was the largest Civil War battle in Wales and this was the last major battle to be fought on Welsh soil; as such the battle is of regional importance. The documentary study has indicated that the study area was within the Royalist line at the outset of the battle, and the presence of six musket balls may be considered as an indication of the presence of activity on the site during the battle, albeit only skirmishing. The principal impact on the battlefield will be, however, the extent to which the development will affect the views outward from the town and castle over the landscape of the battlefield: this is addressed below.

5.3 HISTORIC SETTING AND CHARACTER

- 5.3.1 **Historic Setting:** an assessment has been undertaken of the historic setting of the proposed study area on the basis of the vista analysis, which is in turn based on views of the computer model of the proposed new build superimposed on the vista photographs. The key element is the proposed high bay warehouse, and the assessment examined whether this would affect vistas in towards, or out from, the town. Given the proposed building's design it will have no significant impact on the setting of the historic town when views towards the town are considered. It is surrounded by modern development and for the most part will blend into the background of the built area. It also has no appreciable impact on the setting of the castle. When viewed from the town defences and castle, however, looking out to open countryside, the impact on setting is more appreciable. There is no doubt that the development will adversely impact on an appreciation of the setting of the Battle of Montgomery. However, the area affected has already been severely compromised

by other recent developments: without those other developments, the impact on setting could be considered severe, with them it can only be considered moderate.

- 5.3.2 **Historic Character:** the character of the landscape when looking towards the town will be little affected by the proposed development. The present character is urban, and in the foreground of the townscape it is essentially modern. The proposed development will not detract from this impression, though its addition will not be significant to the overall appreciation of the urban character. The character of the open landscape viewed from Montgomery will be compromised, but the area proposed for development already has modern developments in the foreground and background of its situation. Without these developments the adverse impact on character would be moderate, with them it can only be considered to be of low impact.

6. IMPACT

- 6.1 On the evidence of the documentary and surface surveys, the identified archaeological resource within the study area is of local archaeological significance only, and the present archaeological surveys would provide an adequate mitigative record of the extant earthworks. However, on the basis of the initial findings of the vista analysis it would appear that the visual impact of the proposed development will be of greater consequence. The proposed high warehouse would stand considerably higher than local buildings and would not be shielded by the present tree cover, particularly when viewed from the castle. The development site lies in a low-lying valley overlooked by scheduled monuments at Montgomery, Hen Domen and Fridd Falwyn, and by the Offa's Dyke National Trail, and the factory buildings will have a moderate visual impact when viewed from the castle or the town, but not when viewed in towards the town. From the west, the warehouse would also be prominent, particularly from the B4385 approach road.
- 6.2 The study has highlighted that the study area was probably within the extent of the Royalist line at the Battle of Montgomery, and to an extent this is corroborated by the finding of a limited number of musket balls within the extent of the study area. Physically there are no surface remains relating to the battlefield, indeed it is unlikely that there were ever any earthworks relating to the battle, although there were potentially some relating to the earlier siege works. While the development will have little impact upon any archaeological features pertaining to the battle, it will have a moderate impact upon the vista of the overall battlefield landscape as viewed from the northern side of the town or castle, and would be classified as a severe impact if it were not for the earlier encroachment by new build housing and the existing Montgomery Thermostat factory buildings.

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APPENDIX 1 PROJECT BRIEF

APPENDIX 2 PROJECT DESIGN

Lancaster
University
Archaeological
Unit

November 1999

MONTGOMERY THERMOSTATS MONTGOMERY POWYS

ARCHAEOLOGICAL SURVEY AND HISTORIC LANDSCAPE IMPACT ASSESSMENT

PROJECT DESIGN

Proposals

The following project design is offered in response to a request by Burgess Partnership Limited, for an archaeological survey and Historic Landscape Impact Assessment on land adjacent to Montgomery Thermostats, Montgomery, Powys.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 Burgess Partnership Ltd have requested an archaeological survey and Historic Landscape Impact Assessment in advance of a proposed extension to the existing Montgomery Thermostat works, which is to the north of the historic town of Montgomery. The proposed development site is within the historic landscape of the vale of Montgomery (Cadw/ICOMOS/CCW Register of Landscapes of Outstanding Historic Interest in Wales: ref HLW (P) 2) and the study will serve to assess the visual impact of the proposed development with respect to the castle, the town walls and other local historic sites. It will also assess the direct impact upon the extant surface landscape within the study area. The programme will involve a desk-based study to establish the history, context and significance of the site, a landscape survey to record the surface survival of the archaeological resource, a metal detector survey to investigate the artefactual survival from the Battle of Montgomery of 1644, and finally an historic Landscape Impact Assessment to examine the impact of the development on the visual setting of the landscape.

1.2 HISTORICAL BACKGROUND

- 1.2.1 Montgomery is one of the most important and historic centres of central Wales. The original castle was that at Hen-Domen, a motte and bailey castle built by Roger de Montgomery at some time after AD 1070, which was constructed as a forward outpost of Shrewsbury. From 1102 until 1207 the motte was held by the de Boulers, but thence the land reverted to the crown. In 1223 the present stone castle was constructed by Henry III and the medieval town of Montgomery was integral with this castle.
- 1.2.2 In September 1644, during the English Civil War, the castle of Montgomery was held by parliamentary forces and was sieged by the Royalists. In the ensuing battle 3000 Parliamentary troops defeated a larger force of 5000 Royalist troops; there is some possibility that the proposed study area was the scene of skirmishing as elements of retreating royalist troops were pursued. After the end of the war the castle was viewed as an unnecessary risk and was slighted in 1649.
- 1.2.3 The proposed study area contains a part of the historic battlefield and there are also extant earthwork remains relating to early field-systems and cultivation. The site itself thus has archaeological potential, which warrants assessment, and the proposed development has the potential to impair visually the historic landscape of Montgomery. As a consequence a detailed archaeological assessment of the site has been recommended by Powys County Council.

1.3 LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

- 1.3.1 Lancaster University Archaeological Unit (LUAU) has considerable experience of the archaeological survey of sites and monuments of all periods, having undertaken a great number of small and large projects during the past 18 years. LUAU has particular experience in the recording and analysis of standing ancient monuments, historic buildings and landscapes. Of most relevance LUAU acted on behalf of private developers at the Tewkesbury Battlefield public enquiry; this involved implementing a metal detector survey of the study area to assess the extent of the battlefield and also a programme of vista analysis to assess the visual impact of the development. In addition a comprehensive landscape assessment was undertaken of a proposed windfarm (Brampton) adjacent to Hadrian's Wall, which also involved vista analysis as part of a landscape impact assessment. LUAU has undertaken a major fabric survey of nearby Wigmore Castle, in the Welsh Borders.
- 1.3.2 Projects have been undertaken to fulfil the different requirements of various clients and planning authorities, and to very rigorous timetables. LUAU has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency.

2. OBJECTIVES

- 2.1 The objectives as defined within the project brief, prepared by the Curatorial Section of Clwyd-Powys Archaeological Trust: , are as follows:
- To undertake an historical and archaeological desk-based assessment of the site and to assess the historic potential.

- To undertake a landscape survey of the site to record the extant surface features.
- To undertake a metal artefact detection survey of a sample of the total study area to establish the presence or absence of artefacts relating to the Battle of Montgomery.
- To undertake a Historic Landscape Impact Assessment to investigate the extent of the visual impact that the proposed development will have upon the landscape and from key historic sites.

3. METHODOLOGY

3.1 HISTORIC AND ARCHAEOLOGICAL DESK-BASED STUDY

3.1.1 This will entail the preparation of an assessment report to place the study area in its historical, archaeological and topographical context, and to assess the historic and archaeological significance of the site.

3.1.2 **Documentary and cartographic material:** The documentary research will involve the examination of written, cartographic, and pictorial sources; it will concentrate primarily on the Powys County Archives, at Shire Hall, Llandrindod Wales, but will also examine the Powys Sites and Monuments Record at the Clwyd-Powys Archaeological Trust (CPAT), the National Library of Wales, Aberystwyth and the RCAHM(Wales) Aberystwyth. This work will address the full range of potential sources of information and will examine early histories, early maps, and such primary documentation (tithe and estate plans etc.) as may be reasonably available. The study will examine the Powys Estate mapping, and would include those stored at CPAT. Any photographic material lodged in either the County Sites and Monuments Record or the County Record Offices will also be studied. Published documentary sources will also be examined and assessed. The study will undertake a search for contemporary accounts of the Montgomery Battle, which were commonly created following civil war battles, and may inform as to the location of the skirmishes.

3.1.3 A scan of published sources is also proposed, to provide a context and chronology for the development of the site. Local societies, local libraries and local museums will also be consulted.

3.1.4 The documentary study is intended to inform the impact assessment and will examine the historical development of the study area and also its recent history. Cartographic regression analysis will be undertaken on the basis of the available historic maps. Excerpts from the historic maps will be submitted as scanned images within the report, and the development of the site will be presented as a series of dated episodic reconstructions of the landscape based upon the modern 1:2,500 OS map. The graphic evidence will be presented in conjunction with descriptive text defining how the landscape has developed.

3.1.5 **Aerial Photography:** a survey of the extant air photographic cover will be undertaken; this may indicate the range and survival of archaeological and structural features in the designated area. Identified features will be accurately plotted at 1:10,000. This will examine sources of information held by the client, the local planning authority, and the Powys County Council. Aerial photographic work will entail liaison with the Royal Commission on the Historical Monuments (Wales), Aberystwyth.

3.2 LANDSCAPE SURVEY

3.2.1 **Access:** liaison for basic site access will be undertaken through Burgess Partnership Ltd.

3.2.3 It is proposed to undertake a level 4 survey (see LUAU survey levels, Appendix 1) of the study area, which is equivalent to RCHM(E) level 3, with the addition of contour detail. The survey will involve the detailed mapping of all surface features within the study area and will record all extant earthworks, particularly those relating to field system and cultivation evidence. The archaeological survey will record the earthwork and archaeological features surviving within the study area, and also the associated primary topography. The survey will be superimposed with base topography scanned in from a 1:2,500 map base in order to provide a topographic context for the site beyond the

limits of the study area. The survey will involve the creation of a detailed interpretative hachure survey which will depict the character of the early agricultural features, and this will be superimposed with the contour survey of height points set at a separation of 10m.

- 3.2.4 Survey control will be established over the site by closed traverse and internally will be accurate to $\pm 15\text{mm}$; the control network will be located with respect to field boundaries. It will be located onto the Ordnance Survey National Grid by the use of Global Positioning Survey (GPS), which will locate to an accuracy of $\pm 0.25\text{m}$. The heights will be tied into OS datum.
- 3.2.5 The surface features will be surveyed by EDM tacheometry using a total station linked to a data logger, the accuracy of detail generation will be appropriate for a 1:500 output. The digital data is transferred onto a portable computer for manipulation and transfer to other digital or hard mediums. Film plots will be output via a plotter. The archaeological detail is drawn up in the field as a dimensioned drawing on the plots with respect to survey markers. Most topographic detail is also surveyed, particularly if it is archaeologically significant or is in the vicinity of archaeological features. The survey drawings will be generated within a CAD system and will be digitally superimposed with the survey provided by the client. Although survey will be generated at sufficient accuracy for a 1:500 output the drawings can be output at any scale as required. The survey would be plotted using RCHM(E) draughting conventions and line thicknesses will be appropriate for reproduction and reduction. The data can also be output as CAD files eg. .DWG or .DXF files if required.
- 3.2.6 If required the contour survey can be output as an isometric reconstruction of the surface.
- 3.2.7 In conjunction with the archaeological survey a photographic archive will be generated, which will record significant features and the general landscape context.
- 3.2.8 The survey would be accompanied by a detailed gazetteer description of individual archaeological features, which will relate directly to the survey mapping. This stage of the survey will involve a detailed assessment of the site by an experienced archaeologist.

3.3 METAL ARTEFACT DETECTION SURVEY

- 3.3.1 The metal artefact survey will be undertaken by David Kierzek and Matt Hepworth of the Lune Valley Metal Detecting Society. They have considerable experience of metal detecting, are extremely responsible exponents of metal detecting, and have worked closely with LUAU on a recent English Heritage-funded evaluation of the site of Scandinavian Silver Hoard. The survey would be undertaken in conjunction with LUAU staff who would undertake the recording of artefacts recovered.
- 3.3.2 A sample area of 30m x 200m will be examined and will be sited in the centre of the field; the survey will be undertaken along 2m transects. The metal detector machines are of modern design and, as standard practice, will be adjusted so as to eliminate background noise.
- 3.3.3 **Artefact Recording:** the position of each artefact will be recorded in three-dimensions using Global Positioning System (GPS) techniques to locate and record the features. GPS instrumentation uses electronic distance measurement along radio frequencies to satellites to enable a positional fix in latitude and longitude which can be converted mathematically to Ordnance Survey National Grid. The use of GPS techniques has proved to be an essential and extremely cost effective means of site recording and using differential techniques can achieve accuracy of better than $\pm 0.25\text{m}$. The depth of the artefact below the surface will also be recorded. The survey will be tied in to the same Ordnance Survey grid as the topographic survey and the distribution of the artefacts will be superimposed with the topographic survey.
- 3.3.4 Each artefact will be ascribed a unique record number, and be bagged separately. The Finds storage during fieldwork and any site archive preparation will follow professional guidelines (UKIC). The finds will be assessed and reported on by the LUAU in-house finds specialist (Chris Howard-Davis), who has considerable experience in the analysis of metalwork.
- 3.3.5 The conservation of any artefacts will be by AML conservator Jennifer Jones at Durham University. In line with English Heritage MAP2 guidelines, all significant finds will be assessed for conservation, and subject to the results of this assessment, and in agreement with the client and the

County Archaeological Curator, the conservation programme will be implemented. The costs for this element are directly dependent upon the number of artefacts recovered; indeed, there is a possibility that there will be no requirement for conservation, and therefore the costs can not be defined in advance of the fieldwork. However, a contingency cost (*Section 6*) is submitted, which would provide for seven days of a conservator, and is likely to be an upper limit for any costs.

3.4 HISTORIC LANDSCAPE IMPACT ASSESSMENT

3.4.1 The proposed study area is within the Montgomery Historic Landscape Character Area (HLCA1070), comprising the key components of a) the town, its defences and the castle; b) the former open-field system; c) the Hen-Domen motte and Bailey; d) the Montgomery Battlefield; e) communication routes; f) background sites. The project will assess the impact of the proposed development within the context of the overall landscape. This will require an assessment of the impact upon the visual setting of key elements of that landscape.

3.4.2 **Vista Analysis:** photography will be undertaken using medium format, and 35mm colour print from key locations looking in the direction of the development site. The photography will be taken with standard 50mm, 70mm zoom and 35mm wide angle lenses in order to assess the visual impact of the development. The photographs will be taken from the following locations as defined in the brief and the locations of each of the view points will be precisely recorded in three dimensions using GPS equipment.

- Looking from the north wall of Montgomery Castle (SO 2215 9685)
- Looking from the top of the town wall defences (SO 22333 9702)
- Looking from the B4385 (SO 2203 9730)
- Looking from the former position of Arthur's Gate (SO 2225 9698)
- Looking from the Hen-Domen ridge (SO 2186 9813)
- Looking from the Montgomery Battlefield (SO 2256 9790)
- Looking from the B4388 (SO 2240 9826)
- Looking from Offa's Dyke (SO 2301 0015)

3.4.3 An outline computer model will be created of the structural elements of the proposed development within a 3D CAD system (AutoCAD14), and this will be to 1:1 scale and located accurately with respect to the Ordnance Survey National Grid. The viewpoint of the model will be defined by the 3D coordinates obtained by GPS during the photographic survey. The perspective view of the model is then superimposed and appropriately scaled with the relevant scanned photograph using combined AutoCAD14 and Photoshop software. The resultant enhanced photographic image will provide a realistic impression of how the final building will look from the selected viewpoint. The process will be repeated for all other viewpoints.

3.4.4 **Outward Vista:** the brief requires the creation of an outward view-shed analysis. This can be implemented by viewing Ordnance Survey 3D modelled mesh data for the Montgomery environs from a view point corresponding to the top of the roof line High Bay Warehouse. LUAU has successfully used this technique to view the shape and form of the Simonside Hills, Northumberland which are otherwise obscured by extensive forestry cover. However, the computerised model will not incorporate structural elements, such as those of the town, the walls, the castle remains or any trees, and it is considered that it may result in a misleading representation. Alternatively, it is suggested that panoramic photographic views be taken from a cherry picker set at the appropriate height (10.5m above ground) and position, and from there a 360° panoramic montage of photographs will be taken. The photographs will be merged using photoshop software to create the final montage. This latter is the preferred option in the opinion of LUAU.

3.4.5 **Impact Assessment:** the results of the surface survey, desk-based study and metal-detector survey, will be used to make a detailed, characterised assessment of the archaeological significance of the affected archaeological resource. This will be based on the criteria of importance, representativeness, group-value, condition, documentation, and associations. It will examine the

extent to which the overall landscape will be affected by the loss of those selected elements identified within the study area.

- 3.4.6 The assessment will also examine, on the basis of the vista analysis, the extent to which the introduction of the proposed development will visually impair the overall historic landscape, and also the setting of the individual elements of that landscape, such as the battlefield, the town / walls, the motte and bailey, and the castle.
- 3.4.7 The overall impact on the historic landscape, by virtue of both the loss of selected elements, and the insertion of an alien element will be defined in terms of the categories: Very Severe, Severe, Moderate, Low Impact or No Impact.

3.5 ARCHIVE AND REPORT

- 3.5.1 **Archive:** The results of the survey and research will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of archaeological projects*, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly quantified, ordered, and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the Institute of Field Archaeologists in that organisation's Code of Conduct.
- 3.5.3 The textual archive will be provided both as a printed document and on computer disks. The data will be transferred in a compatible format for import into the overall survey report. As well as hard copy drawings, the graphical data can also be supplied in digital form, formatted and layered for use in an industry standard CAD format to be agreed.
- 3.5.4 **Report:** two copies of the report and a set of survey drawings will be provided to Burgess Partnership Ltd within four weeks of the completion of the survey. The report will present, summarise, and interpret the results of the programme detailed above, and will include an index of archaeological features identified in the course of the project, together with appropriate illustrations, including copies of the landscape survey, historic maps and drawings defining the cartographic development of the site. The report will summarise the history of the site, and will record the significance of the archaeological evidence within a regional and national context.
- 3.5.5 The report will define the impact of the proposed development upon the historic landscape and will make recommendations for further archaeological recording.
- 3.5.6 The report will be in the same basic format as this project design. Copies of the brief, project design, project management records will be included. Copies of the drawings and photographs will be included. A copy of the report can be provided on 3.5" IBM compatible disk in either ASCII or Word for Windows format.

3.6 CONFIDENTIALITY

- 3.6.1 The report is designed as a document for the specific use of Burgess Partnership Ltd, for the particular purpose as defined in this project design, and should be treated as such; it is not suitable for publication as an academic report, or otherwise without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties or for any other explicit purpose can be fulfilled, but will require separate discussion and funding.

3.7 PROJECT MONITORING

- 3.7.1 Any proposed changes to this project design will be agreed with Burgess Partnership Ltd and the Curatorial Section of Clwyd Powys Archaeological Trust. A preliminary meeting with a representative of the client can be arranged at the outset of the project.

4. WORK TIMETABLE

4.1 LUAU would be able to undertake the proposed programme at very short notice, at present only a weeks notice would be necessary to initiate the programme, although more notice would be appreciated.

4.2 It is envisaged that the various stages of the project outlined above will fall into five distinct phases.

The phases of work would comprise:

- i* ***Desk-Based Study***
5 days (desk-based)
- ii* ***Landscape Survey***
1 day (on site)
3 days (in office)
- iii* ***Metal Artefact Detection Survey***
2 days (on site)
- iv* ***Vista Analysis***
1 day (on site)
2 days (in office)
- v* ***Archive, report and draughting***
3 days (desk-based).

5. RESOURCES

5.1 The project will be under the management of **Jamie Quartermaine BA Surv Dip MIFA** (LUAU Project Manager) to whom all correspondence should be addressed. Jamie has considerable experience of undertaking similar landscape impact assessment projects and is a very experienced landscape surveyor.

5.2 **Richard Newman BA, PhD, FSA, MIFA** (LUAU Director) will act as consultant on the project. He was formerly a Project Manager at the Glamorgan and Gwent Archaeological Trust and has considerable experience of the archaeology of the Welsh Borders. He has undertaken extensive landscape research into the Newbury Battlefield and acted as an expert witness on behalf of the Tewkesbury Battlefield public inquiry, and this involved implementing vista analysis and metal detector surveys in the course of the inquiry.

5.3 The documentary consultancy will be undertaken by **Jo Bell BA Hons**, has considerable experience of undertaking desk-based studies.

APPENDIX 3

SITE GAZETTEER

Site number	01
Site name	Montgomery Thermostats
NGR	SO 2243 9719
Site Type	Ridge and Furrow
SMR number	n/a
Description	A large concentration of ridge and furrow consisting of 11 well-defined ridges running north-west/south-east, in the south-eastern half of the field north of the factory. These ridges were most prominent in the eastern corner of the field, where they were c6m apart, and 0.75m high, becoming broader and shallower towards the south-west (12m wide and 0.3m high). As expected, they appear to predate the post-medieval field lines, as defined by hedgerows and the new road, which visibly truncate the earthworks (the fields were probably enclosed sometime before 1817).

Site number	02
Site name	Montgomery Thermostats
NGR	SO 2247 9719
Site Type	Pond
SMR number	n/a
Description	A boggy pond, cut into the eastern corner of the field through the ridge and furrow (01), with soil upcast mounds, visible to the north-east and south-west of it, obscuring the furrows. The pond is roughly 15m across, and abuts the field boundary to the south-east, post-dating it.

Site number	03
Site name	Montgomery Thermostats
NGR	SO 2241 9726
Site Type	Land drain
SMR number	n/a
Description	A possible land drain runs off north-north-west from the pond (02) for 110m, ostensibly to drain the boggy areas around the north-west of the pond. This is visible as a low narrow linear depression, approximately 1.5m wide and 0.7m deep, which also cuts the ridge and furrow (01).

Site number	04
Site name	Montgomery Thermostats
NGR	SO 2237 9726
Site Type	Pipe trench
SMR number	n/a
Description	A modern pipe-line trench, measuring 2.5m wide by 75m in length, which runs east/west across the mid-point of the field north of the factory, bisecting the north-western ends of the ridge and furrow (01), and the land-drain (03). This has a concrete cap approximately mid-way along its length and is probably a waste-water pipe.

Site number	05
Site name	Montgomery Thermostats
NGR	SO 2236 9728
Site Type	Headland
SMR number	n/a

Description The ridge and furrow (01) abuts a headland to the north-west, visible as two 'S'-shaped linear ridges running east/west, approximately 6m wide and 1m high. These are also probably abutted by ridge and furrow (07) to the north.

Site number 06
Site name Montgomery Thermostats
NGR SO 2234 9730
Site Type Land drain
SMR number n/a
Description A land-drain, measuring c2m wide, 70m long and 0.5m deep, is visible 15m north of the headland (06), running in the same direction as it. This is a curvilinear depression extending from the hedgerow down to the south-west corner of the field. It appears to cut an area of ridge and furrow (07).

Site number 07
Site name Montgomery Thermostats
NGR SO 2234 9732
Site Type Ridge and Furrow
SMR number n/a
Description An area of cultivation visible as a series of shallow ridge and furrow earthworks running for 15m northwards up to the hedgeline, and cut by the land drain (06); these were very faint and only at most 0.3m high. This area of ridge and furrow probably extended up to join central headland (05) originally, though it is not now visible in the area between the two features.

Site number 08
Site name Montgomery Thermostats
NGR SO 2232 9733
Site Type Hollow-way
SMR number n/a
Description Two steep parallel north/south lynchets, which form the western boundary of an area of ridge and furrow (07). Both are west facing; the easternmost lynchet measures c45m in length and 1.2m in height, while the western lynchet is the same length but shallower at 0.6m. These may mark further cultivation marks, though the westernmost lynchet is parallel with the road, and this suggests that this marks the eastern boundary of a hollow-way, now formalised as the road.

Site number 09
Site name Milestone
NGR SO 2230 9735
Site Type Milestone
SMR number n/a
Description A milestone stands on the east side of the B4388, a former turnpike road. It is believed to date from the first turnpiking of the road, and has been in this location since at least the mid-nineteenth century, when it is first shown on Ordnance Survey 6" maps. It consists of a dressed stone post with a cast-iron plate attached.

Site number 10
Site name Montgomery Thermostats
NGR SO 2286 9737
Site Type Field System
SMR number n/a
Description A series of linear earthworks in the field to the north-west of the study area, and observed from an aerial photograph (94/c/0305). They would appear to be residual elements of relict boundaries, and along with boundary 08 (in the study area), with which it is parallel, this would appear to be elements of a former field system that predate that intervening road.

Site number	11
Site name	Montgomery Thermostats
NGR	SO 2238 9738
Site Type	Field System
SMR number	n/a
Description	A linear field boundary crossing the modern day field and observed from an aerial photograph (94/c/0305).

Site number	12
Site name	Montgomery Banks
NGR	SO 2229 9733
Site Type	Field system
SMR number	172
Description	The SMR describes this as a 'supposed enclosure. NW and SW sides have scarps up to 1m high on west-facing slope. North-west scarp continues beyond junction with south-west scarp. Ditch south-east probably drainage use.' This entry is believed to describe the earthworks seen in aerial photograph 94/c/0305.

Site number	13
Site name	Pwll Bank
NGR	SO 221 975
Site Type	Field System
SMR number	174
Description	Adjoins site 01. A curving bank and ditch, formerly thought to be a park boundary or road. Survey by CPAT in 1994 showed it to be part of a field system, 'despite a passing resemblance to a Civil War encampment. Part of this field system has now been recognised on the Tithe Survey'. It is not shown on assessment mapping.

Site number	14
Site name	Montgomery Civil War Battlefield
NGR	SO 2250 9780
Site Type	Battlefield
SMR number	19146; 23178; 38525
Description	According to the SMR, the Parliamentary lines were considered to be between SO 2350 9709 and SO 2209 9818, with the Royalist lines between SO 2309659 [sic] and SO 2188 9772. An archaeologically-supervised search of two fields by metal detector in 1994 produced finds of lead shot, buttons and buckles and a copper alloy sword pommel. It is likely that the present study area lies within the bounds of the Royalist battle array, and may be the site of battlefield skirmishes. It is not shown on assessment mapping.

APPENDIX 4

METAL ARTEFACT CATALOGUE

Find No.	1
Type	Copper alloy: Statuette, Equestrian; three fragments
Description	Part of the leg and haunch of an equestrian statuette, probably showing the animal rearing. Poor quality casting.
Dimensions	L: 55mm; W: 40mm
Date	Post-medieval, Nineteenth Century?
Find No.	2
Type	Copper alloy: Light fitting; One fragment
Description	Metal fitting to support a glass shade over a gas lamp. Highly ornate, with the shade supported by three Nereids.
Dimensions	L: 80mm; W: 70mm
Date	Post-medieval, Nineteenth century.
Find No.	3
Type	Copper alloy: One fragment
Description	Small fragment of triangular-sectioned edge-binding.
Dimensions	L: 31mm; W: 7mm
Date	Post-medieval?
Find No.	4
Type	Lead: one fragment
Description	Flattened fragment.
Dimensions	L: 12mm; W: 14mm
Date	Undated.
Find No.	5
Type	Iron: Horseshoe; one fragment
Description	Smallish horseshoe, calkin visible and several nails still in place. The latter have plain pyramidal heads.
Dimensions	L: 110mm; W: 105mm; Th: 5mm
Date	Post-medieval.
Find No.	6
Type	Lead: Shot, Cast spherical; one fragment
Description	Cast shot, flattened by firing. Casting sprue partially trimmed.
Dimensions	Ext diam: 11mm
Date	Post-medieval.
Find No.	7
Type	Lead: Pipe; one fragment
Description	Narrow bore pipe made from thick sheet, soldered.
Dimensions	L: 48mm; W: 14mm; Th: 58mm
Date	Undated.
Find No.	8
Type	Copper alloy: Buckle, Shoe; one fragment
Description	Flat cast square shoe buckle with 'classical' decoration. Poor quality, flat cast.
Dimensions	L: 40mm; W: 39mm; Th: 2mm
Date	Post-medieval, Eighteenth century?.
Find No.	9
Type	Lead: Sheet; one fragment
Description	Triangular fragment with one end folded over.

Dimensions	L: 87mm; Th: 94mm; Ext diam: 2mm
Date	Undated.
Find No.	10
Type	Copper alloy: Coin, Penny; one fragment
Description	Worn.
Date	Post-medieval, 1861?
Find No.	11
Type	Copper alloy: Loop/handle; one fragment
Description	Cast, round-sectioned wire carefully formed into a ring at one end - perhaps part of an oil lamp wick-raising mechanism.
Dimensions	L: 70mm; W: 22mm; Th: 3mm
Date	Post-medieval.
Find No.	12
Type	Copper alloy: Spring balance; one fragment
Description	Part of a spring balance.
Dimensions	L: 120mm; W: 16mm; Th: 17mm
Date	Post-medieval, Nineteenth century/Twentieth century
Find No.	13
Type	Iron; Lead: Nail, Roofing; one fragment
Description	Small iron nail pushed through a rectangle of lead sheet.
Dimensions	L: 40mm; W: 37mm
Date	Post-medieval?
Find No.	14
Type	Lead: Shot, Cast spherical; one fragment
Description	Cast shot, flattened by firing. Casting sprue partially trimmed.
Dimensions	Ext diam: 9mm
Date	Post-medieval.
Find No.	15
Type	Lead: Washer; one fragment
Description	Large lead washer, now badly distorted.
Dimensions	Th: 3mm; Ext diam: 78mm
Date	Post-medieval.
Find No.	16
Type	Lead: Seal, Wool; one fragment
Description	Plain wool seal, crimped into roughly equal quarters.
Dimensions	Th: 5mm
Date	Post-medieval?.
Find No.	17
Type	Copper alloy: Plaque, Decorative; one fragment
Description	Simple stamped sheet five-point star with central boss bearing a bust of ?Victoria. Part of inscription around the edge reads 'jubilee 188' [??]
Dimensions	L: 43mm; W: 43mm; Th: 1mm
Date	Post-medieval, 1887.
Find No.	18
Type	Copper alloy: Coin, French; one fragment
Description	Five centime piece of Napoleon III, pierced for suspension. date reads 18[]5.
Date	Post-medieval, Nineteenth century.
Find No.	19
Type	Iron: Bar; one fragment

Description	Fragment of rectangular-sectioned iron bar. Perforated, with heads of nails/bolts in place.
Dimensions	L: 83mm; W: 35mm; Th: 10mm
Date	Undated.
Find No.	20
Type	Copper alloy: Coin, Token; one fragment
Description	Token, largely blank and the small device too worn to read.
Date	Post-medieval.
Find No.	21
Type	Lead: Shot, Cast, spherical; one fragment
Description	Cast shot, flattened by firing. Casting sprue partially trimmed.
Dimensions	Th: 7mm; Ext diam: 15mm
Date	Post-medieval.
Find No.	22
Type	Iron: Door furniture, Latch; one fragment
Description	Hinged gate catch.
Dimensions	L: 167mm; W: 29mm; Th: 15mm
Date	Post-medieval.
Find No.	23
Type	Copper alloy: Object; one fragment
Description	Unidentifiable object, pierced, possibly part of an insubstantial hinge.
Dimensions	L: 30mm; W: 24mm; Th: 1mm
Date	Post-medieval.
Find No.	24
Type	Lead: Shot, Cast, spherical; one fragment
Description	Cast shot, flattened by firing. Casting sprue partially trimmed.
Dimensions	Ext diam: 11mm
Date	Post-medieval.
Find No.	25
Type	Copper alloy: Buckle, Belt; one fragment
Description	Decorative belt mount, stamped from thin sheet; gilded. Represents a bewhiskered cricketer holding bat and ball.
Dimensions	L: 58mm; W: 51mm; Th: 10mm
Date	Post-medieval, Nineteenth century.
Find No.	26
Type	Lead: Shot, Cast, spherical; 2 fragment(s)
Description	Cast shot, flattened by firing. Casting sprues partially trimmed.
Dimensions	Ext diam: 10mm
Date	Post-medieval.
Find No.	27
Type	Lead: Sheet; one fragment
Description	Elongated triangle, now crumpled.
Dimensions	L: 72mm; W: 50mm; Th: 2mm
Date	Undated.
Find No.	28
Type	Iron: Object; one fragment
Description	Fragment of strap with offset.
Dimensions	L: 177mm; W: 17mm; Th: 15mm
Date	Undated.
Find No.	29

Type	Copper alloy: Washer; one fragment
Description	Tap-type washer, with organic deposit below head.
Date	Modern.
Find No.	30
Type	Copper alloy: Ring; one fragment
Description	Insubstantial ring.
Dimensions	Th: 1.5mm; Ext diam: 38mm
Date	Post-medieval.
Find No.	31
Type	Lead: Sheet; one fragment
Description	Rectangular fragment of sheet flattened by milling.
Dimensions	L: 48mm; W: 18mm; Th: 2mm
Date	Post-medieval.
Find No.	32
Type	Iron: Door furniture, Strap hinge?; one fragment
Description	Fragment of substantial perforated strap, probably hinge.
Dimensions	L: 40mm; W: 48mm; Th: 3mm
Date	Undated.
Find No.	33
Type	Lead; Pewter: Door furniture, Knob; three fragments
Description	Turned mount and part of hollow, ?spherical door knob, probably in pewter.
Dimensions	L: 27mm; W: 29mm
Date	Post-medieval, Eighteenth century/Nineteenth century.
Find No.	34
Type	Lead: Melt; one fragment
Description	Small, thin roughly circular solidified drip.
Dimensions	Th: 1mm; Ext diam: 27mm
Date	Undated.
Find No.	35
Type	Copper alloy: Door furniture, Snick; one fragment
Description	Door snick of common form.
Dimensions	L: 56mm; W: 18mm; Th: 24mm
Date	Post-medieval.
Find No.	36
Type	Copper alloy: Ferrule?; one fragment
Description	Band of very thin sheet, probably a decorative ferrule.
Dimensions	L: 33mm; W: 14mm; Th: 4mm
Date	Post-medieval.
Find No.	37
Type	Lead: Melt; one fragment
Description	Solidified drip, possibly slaggy.
Dimensions	L: 36mm; W: 37mm; Th: 5mm
Date	Undated.
Find No.	38
Type	Lead: Sheet; one fragment
Description	Triangular fragment of sheet twisted into a loop.
Dimensions	L: 31mm; W: 2mm; Th: 19mm
Date	Undated.
Find No.	39
Type	Copper alloy: Ring; one fragment

Description	Insubstantial ring.
Dimensions	Th: 3mm; Ext diam: 36mm
Date	Post-medieval.

ILLUSTRATIONS

- | | |
|-------|---|
| Fig 1 | General Location Map |
| Fig 2 | Powis Estate Map (1785) (M/DX/5/1) |
| Fig 3 | Tithe and Apportionment (P/X/M/146) |
| Fig 4 | Ordnance Survey first edition 6" sheet (1865) |
| Fig 5 | Ordnance Survey second edition 6" sheet (1903) |
| Fig 6 | Earthwork Survey Map |
| Fig 7 | Contour Survey Map |
| Fig 8 | Metal Detector Artefact Distribution |
| Fig 9 | General Map showing the approximate location of the battlefield lines |

PLATES

- Plate 1 Aerial Photograph of the development site © CPAT
- Plate 2 The development site incorporating the proposed new-build as viewed from viewpoint 1 - Montgomery Castle
- Plate 3 The development site incorporating the proposed new-build as viewed from viewpoint 2 - North edge of Montgomery town
- Plate 4 The development site incorporating the proposed new-build as viewed from viewpoint 3
- Plate 5 The development site incorporating the proposed new-build as viewed from viewpoint 4 former position of Arthur's Gate (SO 2225 9698)
- Plate 6 The development site incorporating the proposed new-build as viewed from viewpoint 5 – on the line of the Hen-domen ridge
- Plate 7 The development site incorporating the proposed new-build as viewed from viewpoint 6 – 'site' of the Montgomery Battlefield
- Plate 8 The development site incorporating the proposed new-build as viewed from viewpoint 7 - the B4388 (SO 2240 9826)
- Plate 9 Outward 360° view from the proposed high bay warehouse



Fig 1 : Location Map

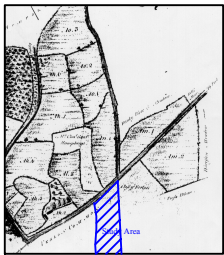


Fig. 2. From Estate Map (1985) (MEXS1)

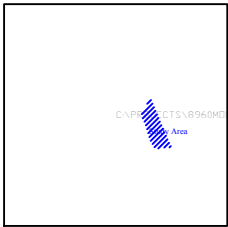


Fig. 3. Title and Approximate PNM146

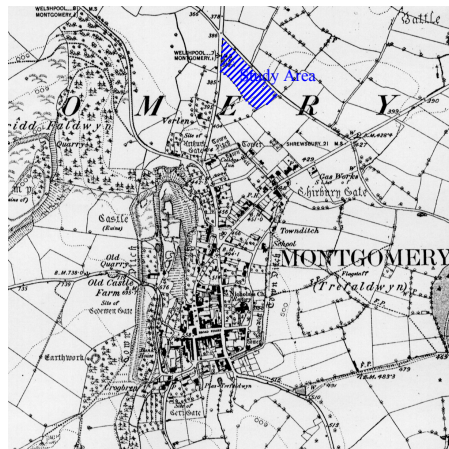


Fig 4 Ordnance Survey First edition 6" sheet (1865)

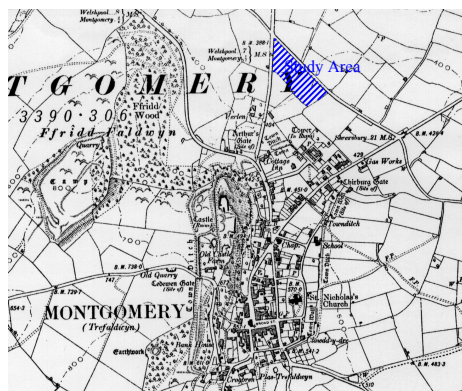


Fig 5 Ordnance Survey Second Edition 6" sheet (1903)

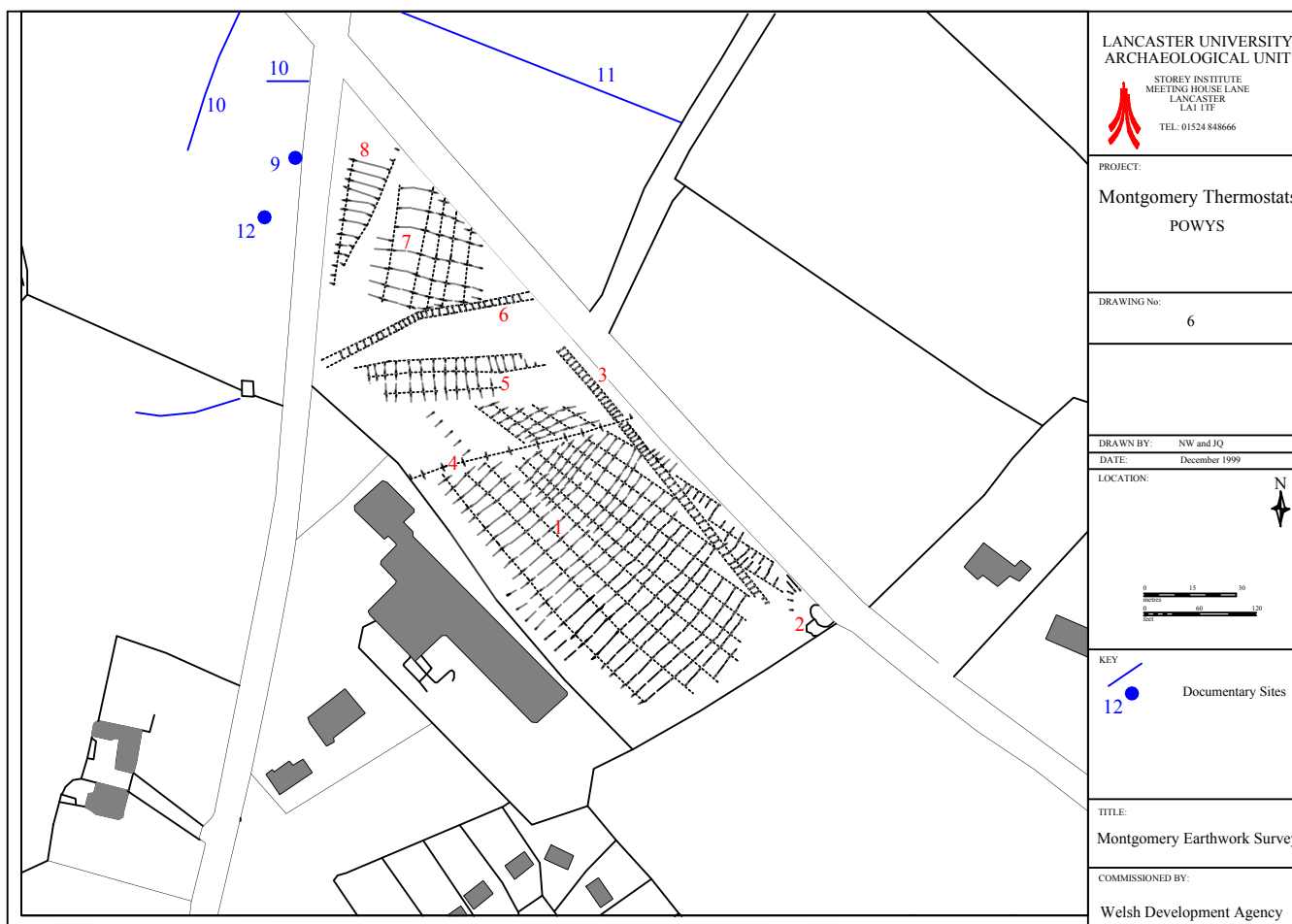


Fig 6: Earthwork Survey Plan

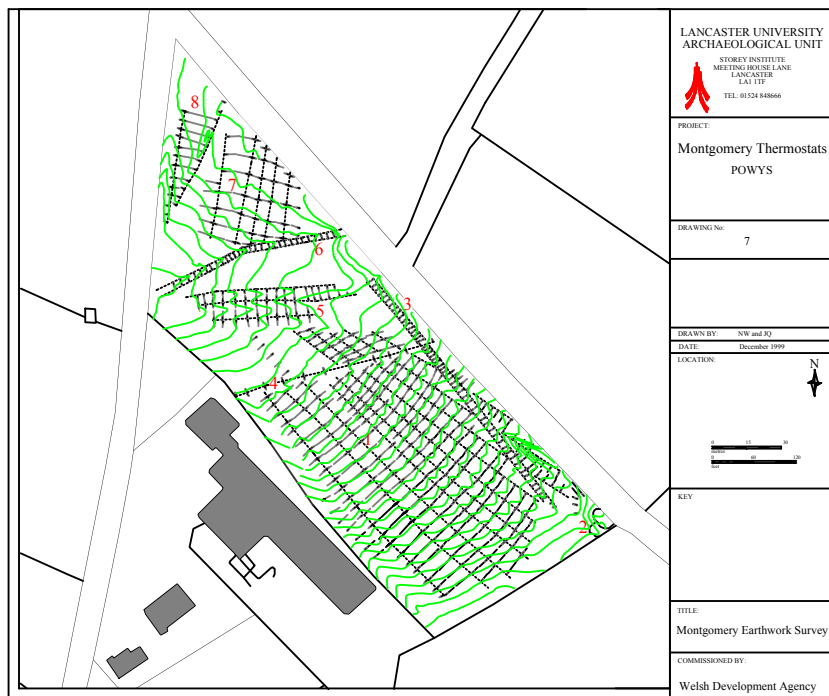


Fig 7: Contour Survey Map

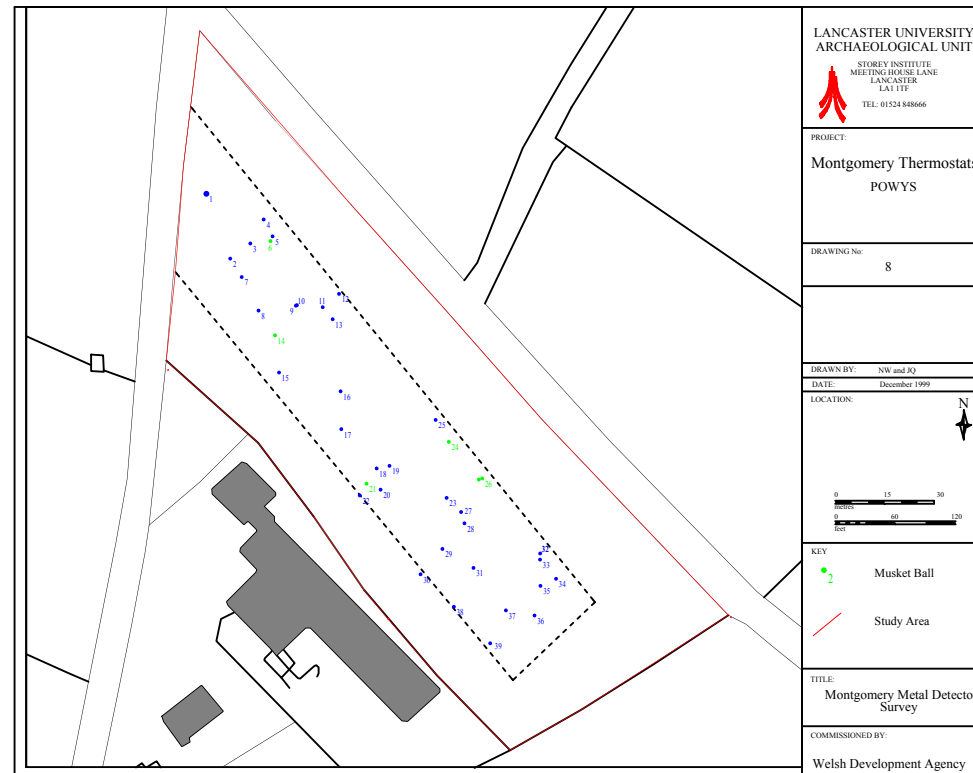


Fig 8: Metal Detector Artefact Distribution

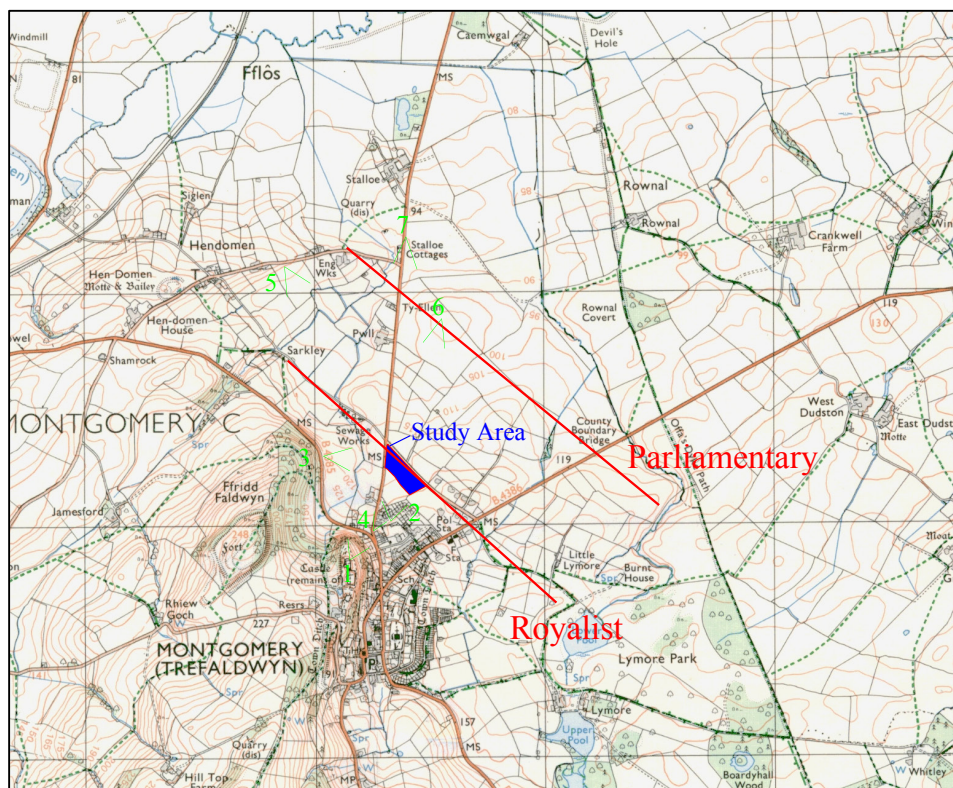


Fig 9 Putative location of Montgomery Battlefield lines



Plate 1 Oblique Aerial Photograph of the study area (94-C-305 ©CPAT)



Plate 2 The development site, including the proposed new-build, taken from viewpoint 1 – Montgomery Castle



Plate 3 Development Site showing proposed new-build as viewed from viewpoint 2 - North edge of Montgomery



Plate 4 Development Site showing proposed new-build as viewed from viewpoint 3



Plate 5 Development Site showing proposed new-build as viewed from viewpoint 4 - former position of Arthur's Gate (SO 2225 9698)



Plate 6 Development Site showing proposed new-build as viewed from viewpoint 5 – on the line of the Hen-domen ridge



Plate 7 Development Site showing proposed new-build as viewed from viewpoint 6 – Site of the Montgomery Battlefield



Plate 8 Development Site showing proposed new-build as viewed from viewpoint 7 – the B4388 (SO 2240 9826)



Plate 9 Outward 360degree view from the proposed High Bay Warehouse