

HEREFORDSHIRE ARCHAEOLOGICAL NEWS



HAN 33 January 1977

**WOOLHOPE CLUB
ARCHAEOLOGICAL RESEARCH SECTION**

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No. 33 January 1977

EDITORIAL

In view of the sharp increases in the cost of paper and printing materials, members will be reminded that the subscription to the Section as from January this year is £1, and should be sent to the Treasurer as soon as possible. At present costs are being borne by individual members of the Committee until sufficient money has accumulated to reimburse them. Will members who pay the Main Club by Bankers' Order please make the necessary adjustment.

We extend our congratulations on the marriage of two of the longest serving members of the Section and wish them every happiness in the future.

A note has been received from Mr W H Chouls Mary Thomas is still plodding through studies and examinations "up North", and sends her regards to all.

A letter received from Mr R H S Robertson of Pithochry Scotland, asks for information on Roman Fulleries and the use of the Woolhope fuller's earth in ancient times. He is collecting material on the history of fuller's earth for a book. Should anyone have any such information I would be happy to pass it on.

I understand that a dig at Kenchester between the site and the gravel pits will be undertaken this year under the auspices of Birmingham University.

Mr Peter Watson-Gould took the opportunity, while excavating for a cess pool last year, to retrieve a collection of pottery, bones and other objects found at different levels, some obviously Roman. These are being examined by Mr R Shoesmith; as a Potter himself these were of particular interest, and members passing by are welcome to call and examine his wares.

I again record my grateful thanks to Mr R Kay, the Assistant Editor, for his unfailing help.

**C E Attfield
Editor**

Note: The views expressed in the articles are those of the individual contributors and not necessarily of the Group.

PROGRAMME – SUMMER – FEBRUARY-JUNE 1977

Sunday, 20 th February	Hampton Dingle*	Further investigation into the Waterworks Complex. Leader - Mr Skelton Meet 11.00 am and 2.00 pm at Englands Gate Public House
Sunday, 20 th March	Lords Wood and King Arthur's Cave	Examination of a Romano/ British enclosure and the legendary cave. Joint Leaders L Skelton and M P Watkins Meet 11.00 am Crockers Ash 2.00 pm Clock Tower, Whitchurch (Stout boots essential).
Sunday, 17 th April	Nant-y-bar	Examination of the purpose of a Medieval causeway and pond sites near Mynwdd Brith. Leader R Kay Meet 11.00 am and 2.00 pm Pandy Inn, Dorstone.
Sunday, 15 th May	Oxenhall	Examination of the Oxenhall pool, lock and cottage, to look for the branch to the Newent Coal fields and the portals of the Oxenhall Tunnel. Leader G Warren. Meet 11.00 am Fire Station, Newent 2.00 pm Beauchamp Arms, Dymock (Wellington Boots essential)
Sunday, 19 th June	Hereford	Visit to the Waterworks Museum, Broomy Hill, Hereford. Meet Museum 11.00 am and 2.00 pm

Note:

1. If any further information is required about this programme, or if in doubt in case of bad weather, please contact a Committee Member or Leader.
2. Guests are welcome at all field meetings.
3. Do not forget to wear suitable clothing and bring sufficient food.

* See revised plan of the Waterworks complex in this issue.

**FIELD MEETING AT LLANVAIR-CILGOED AND PARC-GRACE-DIEU
18th July, 1976**

The meeting was arranged to visit the site of one of the principle granges of the Cistercian Abbey of Dore and to examine the excavations currently taking place there. This was with a view to help in identifying any existing Medieval lay-out and remains at the many grange sites of the Abbey in the Golden Valley, Kingstone and elsewhere.

Being of possible interest to members, a secondary visit was made to the site of the Abbey of Parc Grace Dieu, a late daughter house of Dore, founded in the tranquil valley of the Trothy, near the Hendre, a few miles from Monmouth.

The meeting was well attended and we were fortunate in having with us Rev D H Williams, the historian and authority on the Cistercian Order, who was able to give a condensed history of both sites and interesting sidelights on the economy and functions of monastic granges, with particular reference to those of the Abbey of Dore, which besides its estates in Herefordshire held bequests of vast tracts of lands in both Gwent and Brecknockshire.

The grange site at Llanvair-Cilgoed, (GR 391193) is interesting, as unlike the majority of the other grange sites of the Abbey of Dore it has not been overlaid by later post-Dissolution farm and domestic buildings. Unfortunately, little remains above ground except the lower courses of the walls of a Medieval chapel, the footings of a possible adjacent range of buildings and the precinct wall of the chapel enclosure.

The site is on a southward facing slope above the headwaters of a small stream and seems to lie athwart an ancient and previously existing trackway. This can be clearly seen on the E as a well-marked hollow way where it ascends the hill slope in the direction of the later farmhouse.

Standing to a height of 5' 6" in 1948, the walls of the chapel have now been reduced to little over half that height. They represent a small structurally undivided rectangular building, having an internal measurement of 32' 8" by 15' 3". In the base of the W gable wall are the chamfered jambs of a wide opening, into the blocking of which has been inserted a smaller plain chamfered doorway, also blocked. This W wall was at gable height in 1900, and a sketch made at that time shows the two archways, the smaller inserted in the blocking of the larger. There was also a doorway and a window, probably of 3 lights, in the S wall. The N wall was without openings. Insufficient height remains of the E wall to say whether or not it had a window opening. In view of the existence of a contiguous building at this end it would seem unlikely that there was one. Slight indications of the base of the altar remained and the recent excavations have shown that both the exterior and interior faces of the E wall were plastered. There were internments N and S of the altar base. A large number of worked masonry fragments, relating to window and door jambs, sills and lintels, lie in the debris of the collapsed walls on the E and S. Further fragments have been removed to the vicinity of the W porch and outside the W boundary wall of the later chapel of ease, N of the site. Amongst them is a fragment of window tracery showing the head of a cinquefoiled cusped light, of a similar design to that to be seen in the E window of nearby Llangattock Lingoed Church. Two stones forming the chamfered pointed head of a window or doorway opening have also been revealed by the latest excavations. The detail of these fragments would seem to indicate a late 14th or early 15th C for the construction or refurbishing of the fabric of the chapel. At its external E end, the S wall of a small contiguous building 17' 6" in length still stands a few courses high. It exhibits two chamfered openings, the narrower and more westerly of which was probably a doorway. The interior is choked with debris and the extent of the building northwards has not yet been ascertained. Although the S wall has a straight bond with the E wall of the chapel, it does not seem to be of much later construction.

The chapel stands at the N apex of a large, irregular, roughly quadrangular enclosure, and its W and N walls are considerably recessed into the slope of the paddock beyond. The foundation or footings of the precinct wall are traceable for its entire circuit. At the SE angle the wall, 2' 1" thick, still stands nearly 3' high. The S side is overlaid by a later field boundary hedge bank. Immediately to the SE of the Medieval chapel are the footings of the W wall of what appears to be a rectangular building 41' in length, of undetermined width

and with a N to S axis. The footings of this wall have been partially excavated and show the sill of a doorway 3' in width, some 14' from its N extremity. S of the doorway the wall thickens, possibly indicating two periods of construction or a rebuilding. At the SW angle, the walls, under a turf-clad mound of debris, probably still stand several courses high. The building, if such it was, seems to have had a width of 10' but still further to the E at a distance of 15' are the footings of another N to S wall, which may represent a re-alignment of the precinct wall, which from traces still discernable seems at one time to have run a few feet still further to the E.

Until a few decades ago, the chapel enclosure was utilised as an orchard. Beyond its E precinct wall, a small stream issuing from a spring above a steep sided marshy pool, immediately to the NE of the chapel, has carved for itself a small dingle. This is crossed E of the S end of the "building" detailed above by traces of a trackway which ascends the hillside beyond as a grassy sunken hollow way. Above this crossing the stream seems to have been dammed in antiquity to enlarge and deepen the pool described above. However, the present bank is of quite recent construction. Another boundary wall, of similar fabrication to the precinct wall, ascended the hillside on the S side of the hollow way for a short distance and then angled off to the S above the E slope of the dingle. Where traceable, only its foundations remain. Below it are traces of a small embanked leat which doubtless fed a mill lower down the stream. Two large slabs of stone lying near probably formed part of a footbridge.

To the W and NW of the chapel enclosure, on the field slope above, are the well defined earthworks of at least three rectangular pools fashioned at the head of a natural and now dry bottomed hollow. This has a drop to the SE, and once contained a small tributary of the above-mentioned stream. Immediately to the NW of the site of the W wall of the chapel enclosure, the field slope has been scarped into three terraces of varying widths and heights. Banks and hollows of rectilinear shape, more easily described by reference to the attached sketch plan, would seem to indicate the positions of a number of vanished buildings (possibly of timber) and other features. On the N, these have been partly obliterated by the mid 19th C chapel of ease and its surrounding churchyard enclosure. Additionally, the earthworks of the vanished grange have been partially overlaid by the hedge bank and ditch of later field enclosures. Bordering the road on the W, a slight rectangular platform probably represents the site of a later cottage and its garden.

It is unfortunate that the present limited and rather desultory excavations have been confined to the chapel and its immediate vicinity. This was the one building of which previous surveys had detailed fairly thoroughly. It is to be hoped that exploratory trenching of the remainder of the site will be attempted, so as to throw light on the plans and functions of other buildings of the grange.

Little is known of its early history. The name Cilgoed would seem to indicate a pre-Norman origin for the religious significance of the site. The name suggests a "retreat" or "hermitage" in a wood. Cil is a Welsh root-word found in many place names and of which the English "cell" is the correct equivalent. It appears in Scotland and Ireland as Kil. The site is not mentioned in the Liber Llandavensis. Llanvair, the church of St Mary, possibly indicates a re-dedication of an existing building when it became monastic property.

The hermitage together with the open space around it, six bovates of land and appurtenances in the Forest of Grosmont were granted sometime between 1201 and 1243 by Hubert de Burgh to the Cistercians of Dore. The monks extended this by obtaining further grants of adjoining land, by purchase and exchange. A later grant by Prince Edmund, as Lord of the neighbouring Three Castles, made in 1258, mentions permission being given to the monks to "obstruct the road through the courtyard (curia) of their grange at Llanfair". One path leading to the grange was called "Holeway". This must have been the hollow way previously described. The property was further enlarged by a gift of Prince Edward in 1276. As well as being a grange, Llanvair at first housed a cell of monks and later of secular chaplains to say mass for the souls of the founders

and benefactors of Dore. It is also known that the grange at the Suppression had a heronry, reserved for the use of the Abbot of Dore, when in 1529, he had previously leased the grange to a member of the Baskerville family. The lessees were to maintain a priest for the celebration of divine service there and to say mass for the souls of the benefactors and founders of the chapel and the faithful departed.

At the Dissolution, Llanvair Cilgoed was granted in 37 Henry VIII to Anthony Foster, Gent, and described as the chapel and grange of Llanvair Cilgoed. Soon after, he sold it to Sir Richard Morgan of Blackbrook, whose father had previously leased it. There was then still a priest to say "mattyns, masse and evensong" on Sundays, Holy Days and some other days, mainly Wednesdays and Fridays, as neighbouring inhabitants dwelt far from the parish church. Tithes formerly paid to the Abbey to support the priest amounted to 33/4d. About 1610 there is a mention of rents at Llanvair demised originally to maintain that service and lights in the chapel, and in the same year Philip Morgan was holding the grange and chapel of Llanvair with its lands and woods. These lands endured tithe free into this century. Llanvair chapel was a centre of recusancy. Turberville Morgan, a descendant of Philip Morgan, was living there in 1678. He was a suspected recusant. In 1680 and concerning him, John Arnold gave evidence "that he had seen a Chappel in the house of Turberville Morgan. Esq, and an altar and ornaments on it and hath been informed that Thomas Lloyd a parish priest saith publick mass, Marries, Christens and Buries in the Said Chappel". (Examination as to Popery etc, wef House of Commons 1680). The vicar gave earlier evidence that there were three other houses in the neighbourhood where Popish priests were entertained and that there was in the parish of Llantilio Crossenny (in which the grange site falls) and Penrhos, six score Popish recusants. The grange (or rather the neighbouring farmhouse which supplanted it) subsequently passed to Thos Croft, a Roman Catholic, who used the chapel of Llanvair for the purposes of his religion, in consequence of which an inquisition was held in 1691 and he was adjudged to loose his estate, which was granted to Henry, Lord Delamere. This did not take effect and Thos Croft remained there. Mass was being said at the chapel as late as 1698.

Burials seem to have continued at the chapel until late in the 18th C and it seems likely that the building continued to be used until the early 19th C, pilgrims continuing to visit it well into the 20th C. In 1843 funds were raised but instead of repairing the Medieval building a new chapel was erected on higher ground, NW of the older one. This was in EE style with lancet windows, buttressed walls and consisted of nave, chancel and W porch. Within the vicinity of the grange there was once a small common known as Llanvair Green, but it has long since been enclosed.

From Llanvair Cilgoed, after a picnic lunch partaken at the nearby Three Salmon's Inn, members proceeded via Cross Ash, Llidiart-y-fran, Llanfaenor, Onen and Llanvihangel-y-stern-llewern by picturesque, narrow and unfrequented lanes to the site of Parc-Grace-Dieu Abbey, a daughter house of Dore at GR 453134. The situation of the vanished buildings on the edge of the flood plain of the little River Trothy (Troddi) is still delightfully tranquil and unspoilt.

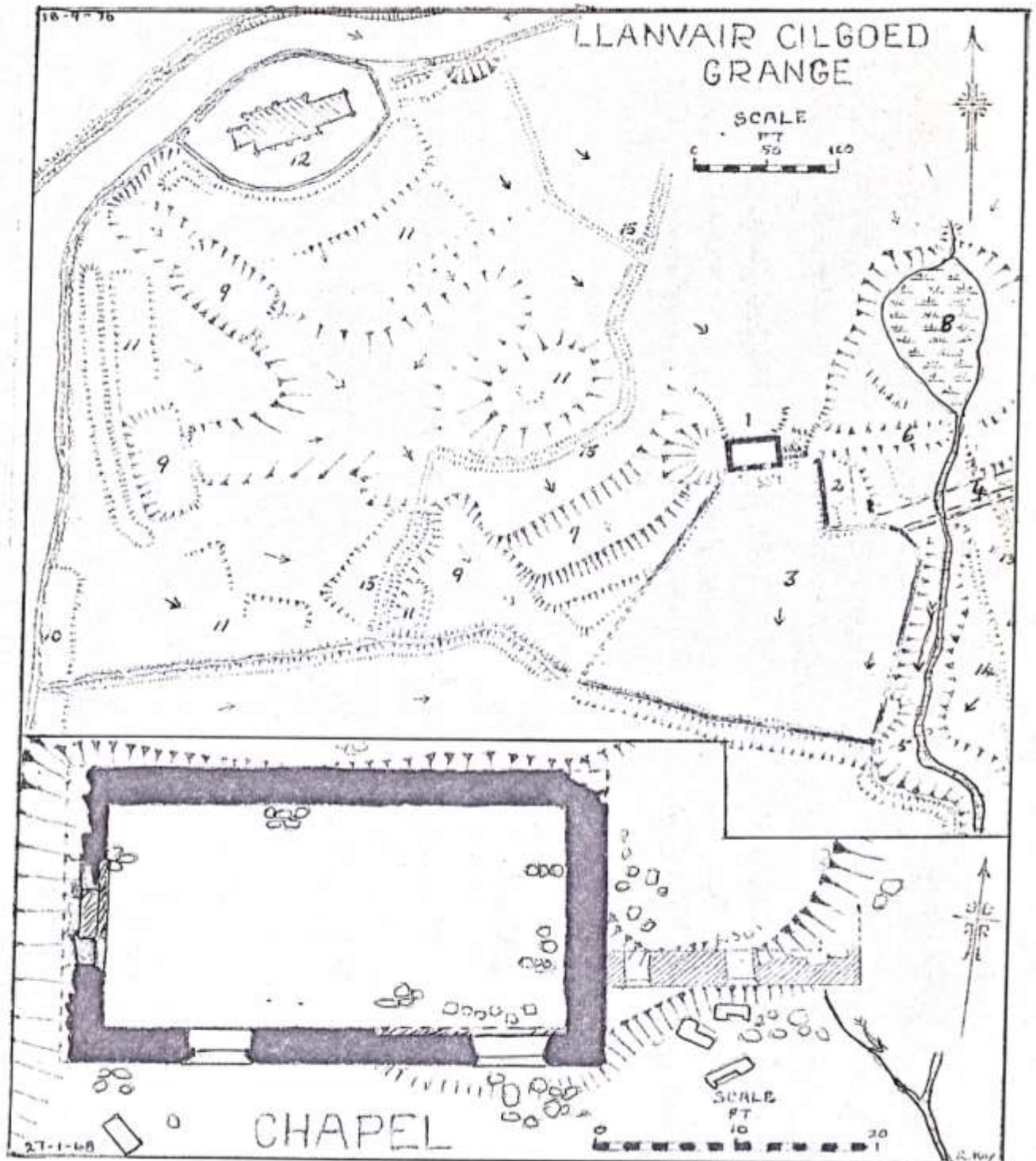
It is unfortunate that no visible trace remains of this small and relatively unimportant Cistercian Abbey, founded by John of Monmouth in 1226. The original foundation, burnt by the Welsh in 1233, may have been on the opposite side of the river, nearer the Abbey Bridge, than at the spot now visited, in the so-called Abbey Meadow. The final site in Abbey Meadow, and possibly extending into the neighbouring fields to the NE, shows a few slight irregularities in the ground surface. An exploratory excavation on the edge of the flood plain made in 1970-71 does seem to have touched upon the fringes of the abbey buildings. Portions of the footings of a late 17th C cottage incorporating many fragments of Medieval masonry (including a good compound EE capital) were discovered overlying the remains of a substantial Medieval wall. Nearby, further trial excavation pits disclosed a cobbled surface, possibly pertaining to the original approach road to the monastic buildings. The slope rising from the flood plain, a little to the NW of the main excavation, has been steeply

cut back, suggesting the site of a building at the foot of its scarp. In 1950 there were still slight traces of a scarp in the adjoining field, seemingly forming one side of an enclosure on the E. A wide bank hidden in the N hedgerow boundary of Abbey Meadow may relate to former fishponds.

Subsequent to the Suppression of the Abbey, the site passed to John Vaughan and then to the Herberts. They seem to have completely demolished the structure and built some sort of a lodge with some of the material, below the present farmhouse of Parc-Grace-Dieu and overlooking the site. Some remains of this building still stand and possibly incorporate stones from the Abbey, as probably does the foundations of the present farmhouse. A capital at nearby Hendre Farm and a double piscinae lying loose in the nave of the nearby church of Llanvihangel-ystern-llewem may also have come from the Abbey.

The Rev D H Williams, in addition to describing salient features of the site, distributed copies of a Report on the recent excavations to members. It is not proposed here to give further details of the history and topography of this Interesting site, details of which are more than adequately covered in his recent book "White Monks in Gwent and the Border". Sufficient is it to remark on the complete disappearance on what must have been a considerable structure, consisting of a minster church, cloistral buildings, gatehouse and barn.

R E Kay
27th September, 1976



Legend

- | | |
|------------------------------|---|
| 1. Medieval chapelry | 9. Site of "fishponds" |
| 2. Grange building? | 10. Site of later cottage and garden |
| 3. Chapel enclosure | 11. Sites of "buildings" |
| 4. Hollow way | 12. Mid 19 th C chapel of ease and enclosure |
| 5. Stone slabs | 13. Foundations of wall |
| 6. Recent earthen embankment | 14. Leat |
| 7. Scarp'd terracing | 15. Later field boundary banks |
| 8. Pool | |

HEREFORD & WORCESTER COUNTY MUSEUM – FIELD ACTIVITIES 1976

The County Museum's Field Officer, Miss A M Wilson, has been continuing to visit all the scheduled ancient monuments in the former County of Hereford to ensure that the conditions of their protection are maintained. Over seventy sites have been visited and fully recorded.

The County Museum has been providing Archaeological and Historical information for the County Planning Department to use in the preparation of conservation areas. Recommendations have been made to the Department of the Environment regarding new scheduling of ancient monuments; a list that is in preparation and will be sent to the Department of the Environment Area Inspector contains over thirty such recommendations. We have also been working closely with the Countryside section of the County Planning Department on preparation of their new Hereford Countryside Treasures Book, a companion volume to the Worcestershire Countryside Treasures.

Miss Wilson has been carrying out a photographic survey of buildings in Leominster, Ross-on-Wye and Weobley. This is initiating a programme which will be carried out as an ongoing project by the County Museum's Field Department.

Miss Babb and Miss Wilson have been preparing a survey of collections of buildings photographs held within the former Herefordshire County. The information taken from these photographs is being put into the County Sites and Monuments Record. Miss Wilson has also been working closely with the County Planning Department on the compilation of a record of known listed buildings.

Miss Wilson has been working extensively with the County Curriculum Advisor for Humanity, Mr R Williams, on a schools' archaeological project at Leominster. It is hoped that the addition of material gathered to that already compiled by Miss Esther Stansfield will lead to the production of a town survey for Leominster.

The excavations carried out at Hall Court, Much Marcle by Mr Alan Hunt, the former County Archaeological Officer, are now nearing completion.

The Urban Excavator, Mr J Sawle, has now completed six trial excavations in the City of Hereford, brief details of which are included in this Newsletter. A further site will be excavated when it becomes available in December. At present, Mr Sawle is preparing reports on the completed excavations. An interim report will be completed in the next two weeks and a final report by the end of March 1977.

HEREFORD AND GLOUCESTER CANAL – MILL SITE AT MONKSBURY COURT

Preliminary notes of the field day held at Monksbury Court were published in the last Newsletter (No 32, June 1976, page 13).

Since then a copy of the 1904 Ordnance Survey 1:2500 map has been brought to my attention. A simplified detail of this map appears as Map 1: 1904. The same area of the later map appears as Map 2: 1928. The location of the site is SO 6215.4385. The Mill is clearly marked as "Corn Mill (Disused)" on the 1904 map but all that is shown on the 1928 version is the tail leat from the mill. The maps also clearly show that the canal aqueduct over the River Lodon has been removed, probably to alleviate flooding.

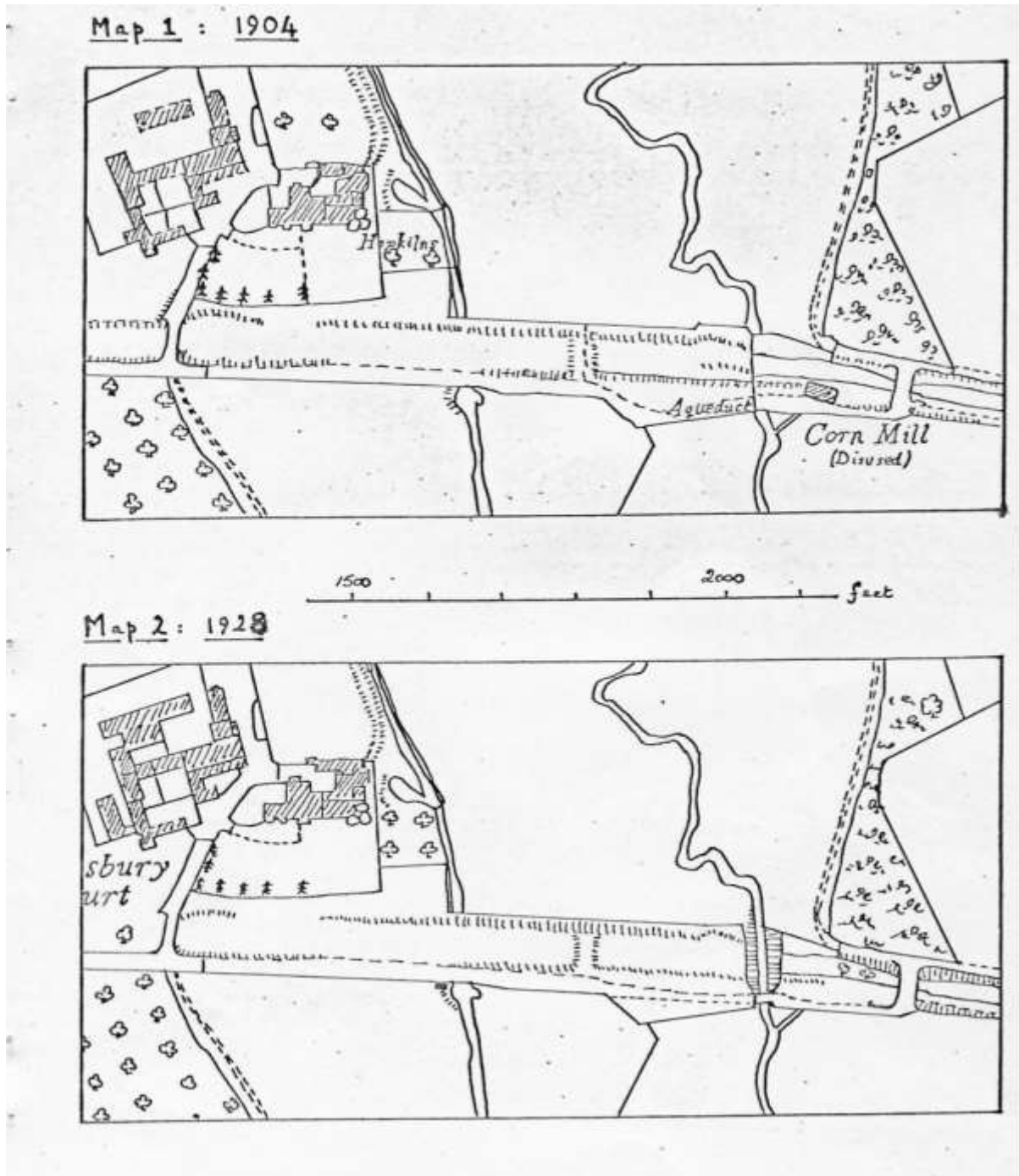
The opinion that the usual arrangement of a mill working directly off the canal must mean that the Mill predates the canal is borne out by a reference in the diary of the canal engineer, Stephen Ballard, for 10th May, 1838, "Levelled to Monkhide Mill and looked over the line to Monkhide Green". Work began to extend the canal from Ledbury to Hereford in 1830 but little was done except to build a lock at Ledbury. The real excavations began in December 1839 to dig the 7 miles from Ledbury to Canon Frome, and this came into operation during August 1842. Withington was not reached until February 1844. The date 1843 cut into the stonework of the sluice in the North bank of the canal at Monksbury Court is therefore indicative of the date at which work on that section of canal was completed.

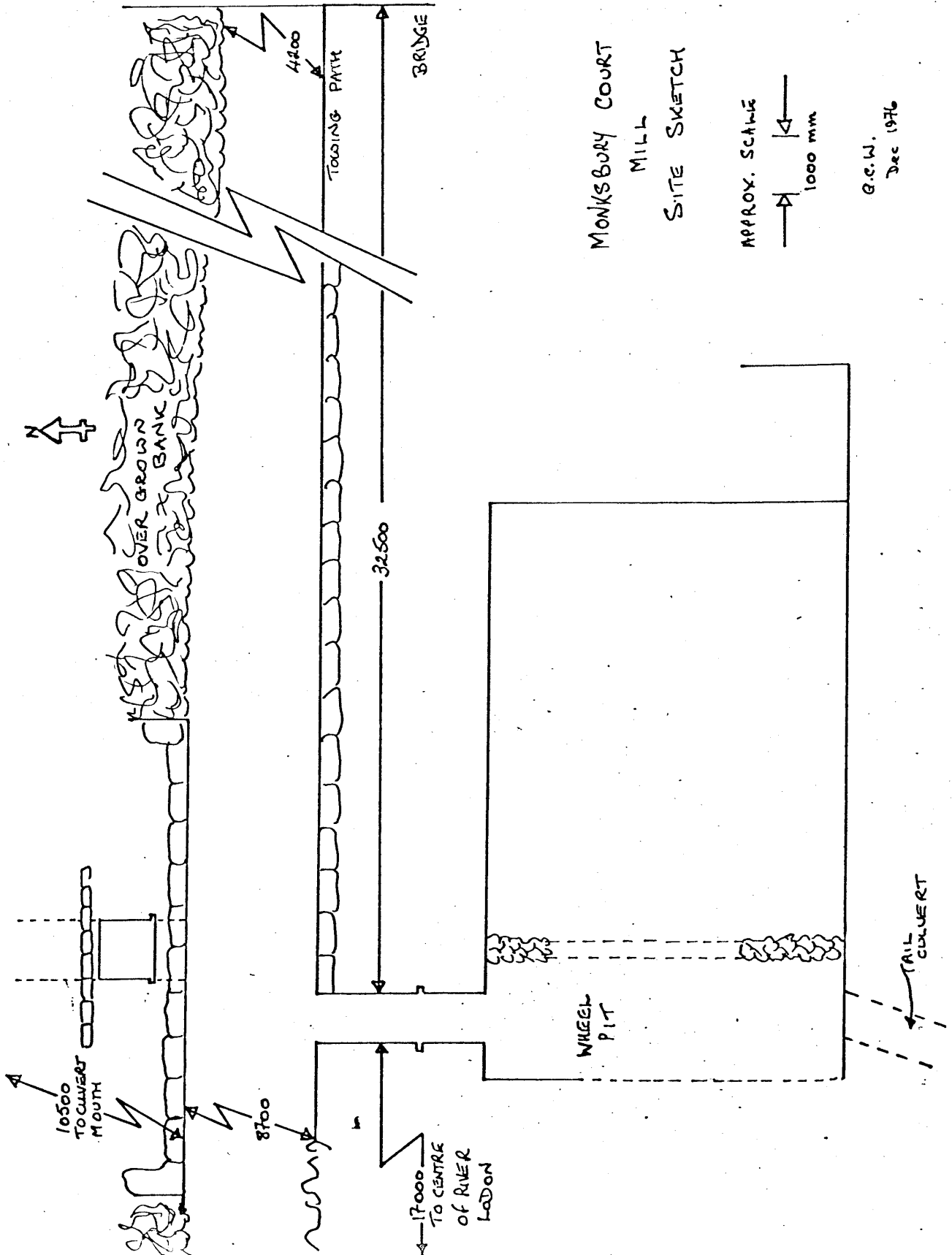
The Mill itself was a modest affair. The square holes in the West and North walls of the wheel pit buildings and the size of the sluice indicate that the wheel can have been no more than 1 metre radius and up to 1 metre wide. The possible wheel-bearing hole in the

West wall was only fractionally below (2 inches) the level of the bottom of the sluice entering the wheel pit. The top of the tail culvert arch was 760mm below ground level although the ground level on the south side of the mill was lower than the towing path. A stone section resembling a millstone was found buried in the ground to the West of the River Lodon. It was not possible to clear the stone but the likely diameter would be about 900 mm.

I am indebted to Mr John Wride for a copy of the 1904 OS 1:2500 map.

G C Warren

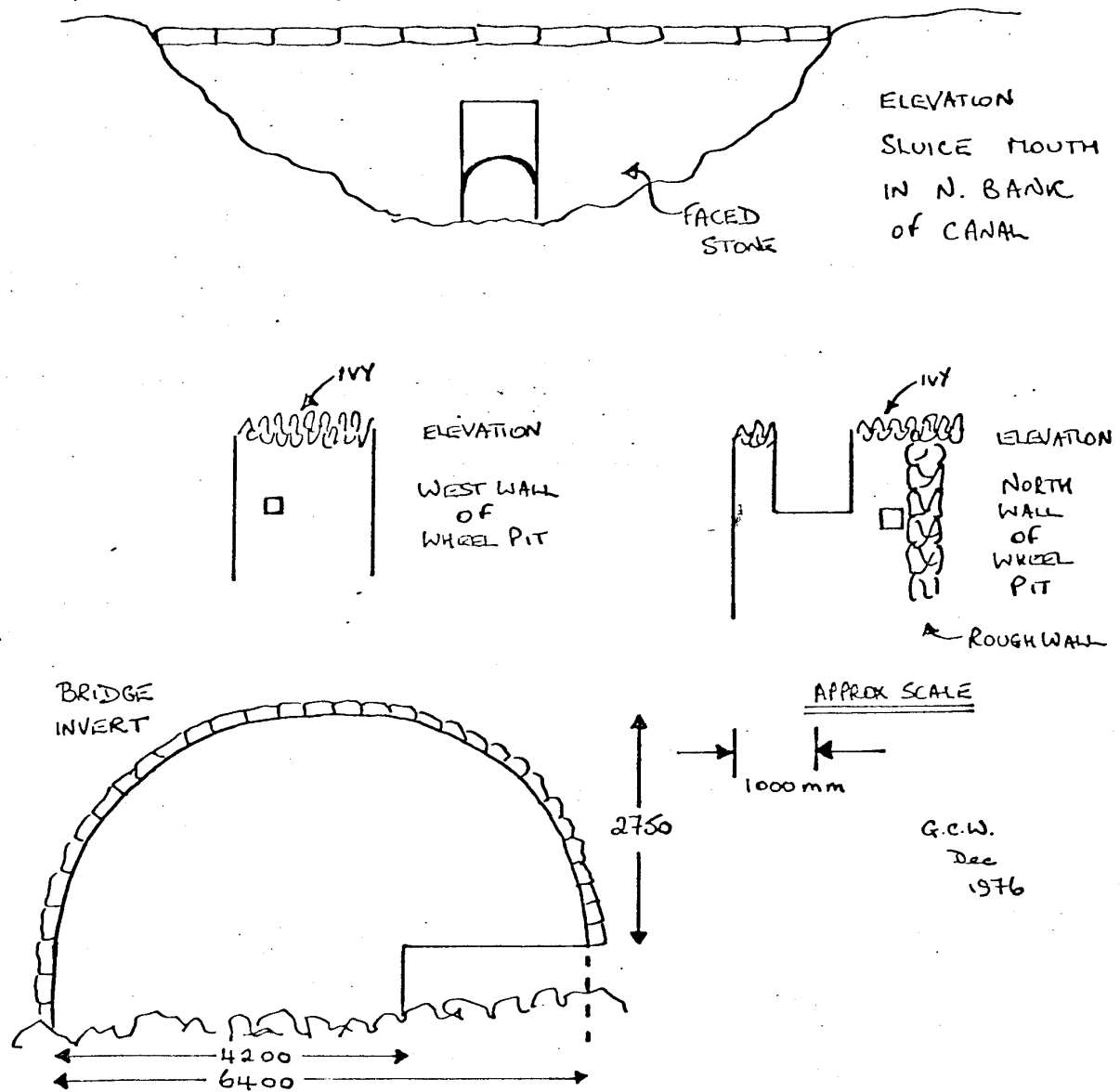




MONKSBRURY COURT
MILL
SITE SKETCH

APPROX. SCALE
1000 mm

G.C.W.
DEC 1976



**CITY OF HEREFORD ARCHAEOLOGY COMMITTEE
INTERIM REPORT ON EXCAVATIONS IN BERRINGTON STREET, HEREFORD**

Introduction

St Nicholas House, the office complex at the corner of St Nicholas Street and Berrington Street, is to be extended to the north, fortunately to a different design, and will cover the remainder of the vacant site.

Previous excavations in 1972 and 1973 were concentrated on the more westerly areas of the site where it was expected that the earlier levels would have been protected by slip off the tails of the various ramparts.

The Department of the Environment made a grant of £3,000 available for an examination of the Berrington Street frontage of the new development site, and arranged with the developers for a 3-month period ending 31st May, 1976 to be available for the work. We were not able to start on the site until the 22nd March, but the developers allowed an extension and the excavation was finally completed on 25th May.

Methods

The area chosen was restricted to the south by the access to the St Nicholas House car park, and to the north to allow machine access to the site. It was not practicable to extend to the pavement on the east because of a 4 inch gas main. An extension to the west was considered but was not possible with the resources available. The total area was approximately 200 square metres.

A machine was used to clear the site of builders' debris and continued with a wide bucket to remove the top levels. Hand clearance did not start until 5th April.

The initial labour force was students from Hereford Cathedral School during their Easter holiday, and was followed by several groups of youngsters from Haywood School who worked on the site as part of their CSE course in Medieval History. An assistant site supervisor was employed throughout the excavation to deal with the processing of finds, and a second one on site for the last three weeks to help with the excavation and planning of the earlier levels. My assistant, Martin Boulton, worked on site from his arrival on 20th April and John Sawle, the County Urban Excavator, helped for a few days at the beginning of June.

Spoil has still to be removed from the site and £500 has been reserved for this purpose. The remainder of the excavation has cost approximately £2,500 and is within the amount allowed by the DOE grant.

Results of the Excavation

Continuous occupation of the site had caused many disturbances. The early levels were only present in parts of the site but remained in sufficient quantity for a reasonable assessment to be made.

Period 1: Earliest levels - 9th Century and earlier

Within the area examined, traces of postholes and gullies were concentrated along the east side, close to Berrington Street. In area I, to the northeast, sufficient remained to suggest a timber building following the Berrington Street line. Although east-west and north-south alignments of postholes were found, it was uncertain if these represented internal or external walls. The posts, found in some cases as voids, were plank-like in shape, some 25cms by 5cms with the long side following the line of the building. One post was sealed under a hearth of period 2. In area II, at the southern end of the road frontage, there was also evidence of a building. The fragmentary remains suggest the corner of a building aligned with Berrington Street and continuing to the south and east. There was a narrow metalled path along the west of this building.

It is possible that further buildings existed on the site during this period, and slight traces were found in areas III and IV.

No significant finds could be ascribed to this period, which appeared to be aceramic. No datable evidence was uncovered.

Period 2: 10th to early 11th centuries

This period is characterised by many fragments of Chester ware, but in the main without any other types of pottery.

Area I contained two successive levels of clay floor and hearth, the later hearth being well constructed of stone and clay. If the original building of period I is interpreted correctly, the buildings of period 2 were extended from the original line to the south, but stayed about the same width.

In areas II and III, a hearth and poorly laid clay floor suggested an extension to the north of the original building in the south-east corner, with a further building to the west, replaced during this period by a roughly metallated yard.

Chester ware was concentrated in areas I, II and III, with little in area IV, where there were no signs of occupation.

Period 3: mid 11th to early 12th centuries

Chester ware continued in use, but other fabrics were present, including limestone-tempered wares, Stamford ware and occasional fragments of non-local early glazed wares.

Area I had an ashy make-up on top of the period 2 clay floor, with a comparatively well laid clay floor on top. The slight indications of timbers were insufficient to establish the shape of the building.

In area II, a gravel build-up at the extreme eastern side could have been the edge of Berrington Street or a front yard area. A further clay floor had been laid, which showed many signs of burning. Centrally was the stone base of what may have been a timber centre-post. Sufficient remained for the Berrington Street alignment to be established. The building was associated with a re-metalling of the western yard area and probably with the remains of two other buildings with clay floors near the centre of the site. Areas I and II were covered in a thick layer of ash and slag suggesting an industrial use which continued well into the 12th century.

In the above periods only portions of buildings were found. Parts were outside the excavation area and parts were cut out by features of periods 4-7. It is noteworthy that only 3 or 4 pits were found prior to the mid 12th century over the whole site.

Period 4: 12th and 13th centuries

A rapid increase of black Malvernian cooking pots, tripod pitchers and a gradual introduction towards the end of the period of glazed vessels.

Occupation along the street frontage can only be postulated during this and the following period. Any remains of these two periods must have been removed during levelling operations in period 6. During the 12th and 13th centuries at least 12 large pits were dug in various parts of the site. Previous Berrington Street excavations have shown that this type of pit had few features of interest, and in most cases they were only taken down to the natural soil surface.

A clay floor suggested a centrally placed building during the 13th century, probably constructed on sleeper beams.

Period 5: 14th to 15th centuries

The site probably contained two separate properties during this period, although traces of occupation as a whole were slight. In the larger area several small, but regular, deep pits in a line suggested an industrial use. One of these produced most of a large, simply decorated jug.

The northwestern corner of the site was used for the manufacture of cauldrons, and many fragments of moulds and slag were found. Unfortunately, the furnace area appears to be outside our area, further to the west.

Period 6: 16th to 18th centuries

A large pit of uncertain use and a small stone-built cellar cut out the earlier levels along half of the street frontage. The cellar was small with a central platform.

It was superseded by a building with stone footings, including the remains of a stone chimney stack, in the early 17th century. Remains of cross walls and mortar floors survived, but the main front wall was closer to Berrington Street.

The stone sided pits of very early 18th century date in the extreme southwestern corner of the site, adjacent to the 1973 excavations, produced an excellent collection of whole glass wine bottles, clay pipes, pottery and useful environmental evidence.

The foundation of a stone building in the northwest corner of the site also dates from this period.

Period 7: Modern

Modern disturbances, caused by drains which ran at various angles across the site from a central manhole, increased the difficulty of relating various parts of the site. The concrete foundations, cut to below natural, of St Vincent's School were left in place.

Conclusions

For the first time in Hereford a street frontage excavation has been carried out. It has shown that, if areas are carefully chosen, fully stratified deposits from the earliest levels of the town are still present. The site has produced more sherds of pre-conquest and late 11th century pottery than any other in Hereford. The concentration of sherds around the buildings, with little scatter in the surrounding areas, is markedly different to later periods. The sequence of pottery fabrics, which had previously been postulated for the 10th to 12th centuries, can now be confirmed, and although firm dating evidence is still not available, this must surely be forthcoming soon. The low level of subsistence in the earlier periods is demonstrated by the paucity of finds and by the bone remains which are mainly of animal extremities or are split long bones.

In the surviving frontage area and in the previous excavations only one period of occupation could be identified prior to the introduction of Chester ware. This has to be compared with the two pre-rampart and two rampart periods found in 1967/68. Occupation up to the 10th century may well have been sporadic and was not of any great density.

The common orientation of all the buildings found on the site, and the concentration of occupation in all periods to the east of the site, strongly suggests that the line of Berrington Street has been unaltered throughout the city's history. This evidence, together with that accrued from previous excavations, helps to confirm the theory that Hereford was laid out as a planned town by the 9th century at the latest. The concentration along the street frontage is interesting in its own right. With ample ground between Berrington Street and the rampart, buildings were still constructed as close to the road as possible.

**R Shoesmith
30th June, 1976**

TRIAL EXCAVATIONS IN HEREFORD, 1976

Seven trial excavations were proposed during this financial year to assess the archaeological potential of the threatened area (10 acres in total), in the northern sector of the City. Five trenches have now been examined, and a brief summary of each follows. They were directed by the Urban Excavator at the County Museum.

1. 40 Bewell Street, SO 5088 4008

An attempt to discover a possible road leading northwards from the Saxon North Gate on Broad Street was unsuccessful because the area examined was completely disturbed by thirteenth century pitting.

2. NCP, Bewell House SO 5073 4006

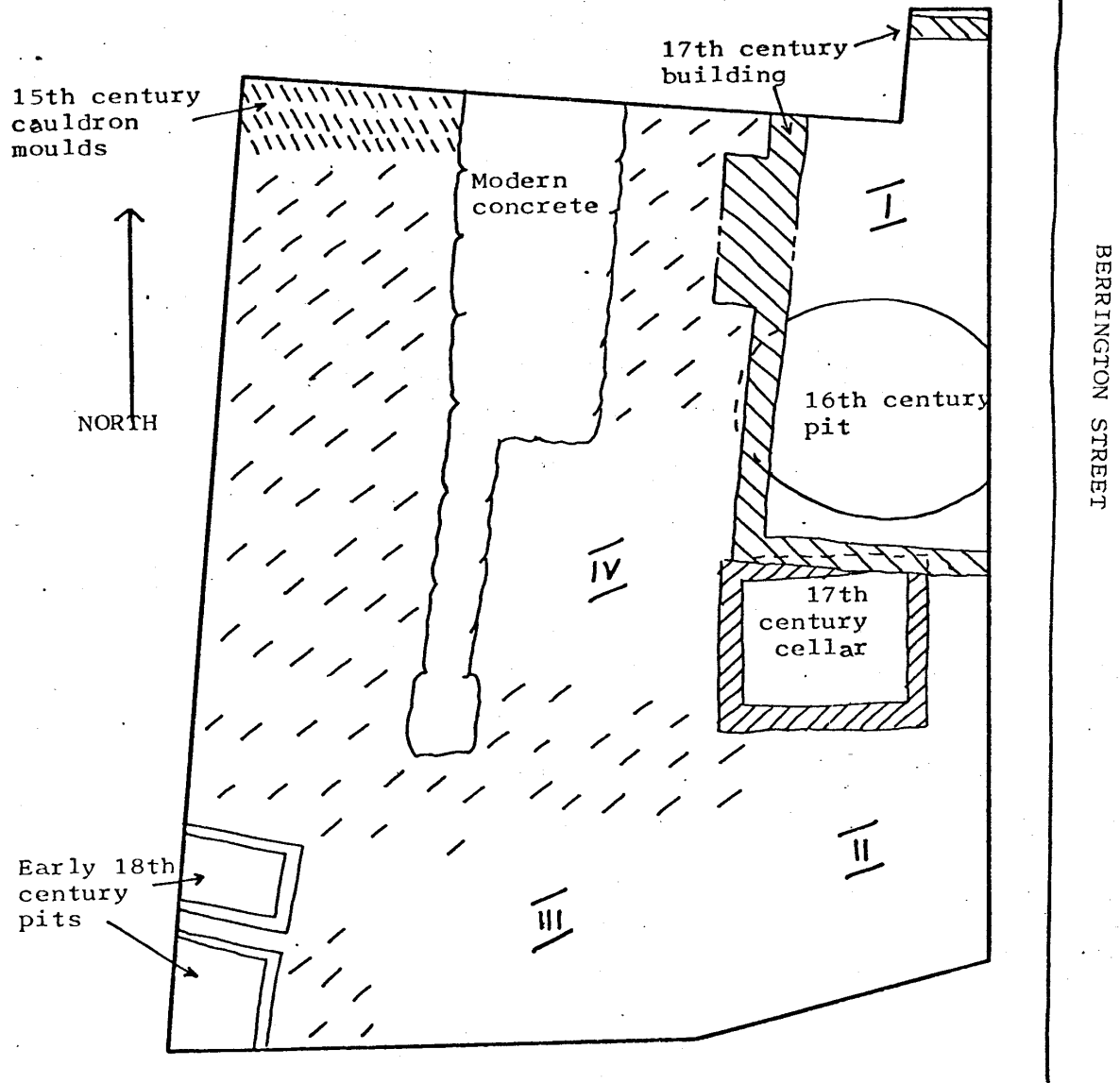
An area 3.5m by 5.5m was examined along the Bewell Street frontage. The stratigraphy was complex, and the main features were a series of gullies and postholes. The earliest pottery on the site has been dated to the late eleventh century. The area excavated was too small to identify any possible building lines.

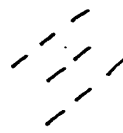
3. Between 27 and 28 Commercial Street, SO 5121 4015 (Trinity Almshouses)
A 5m square trench was excavated along the Commercial Street frontage, in an area known to be part of the thirteenth century Jewish Quarter. Two parallel gullies, adjacent to Commercial Street, contained early twelfth century pottery, and the main one was suggestive of a palisade trench. Later occupation was represented by thirteenth and fourteenth century pits and a stone-built house, the clay floor of which sealed fourteenth century pottery.
4. Wall Street, SO 5094 4020
A 5m square trench was dug on derelict ground, about 10m inside the standing stone City Wall. The tail of a gravel rampart was found virtually intact, and it contained late twelfth century pottery. It sealed two features, one of which, a gully, was associated with a sherd of Chester ware. Covering the rampart was a deep layer of cultivated soil, with few disturbances.
5. Maylord Street, SO 5104 4014
A trench along the street frontage was dug by machine, and a strip at least 8m long was examined. The whole area appeared to be modern factory foundation, and no earlier features were recorded.

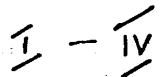
J Sawle, Urban Excavator

BERRINGTON STREET, HEREFORD - BLOCK PLAN

(Drains not shown)



 Areas where 12-13th century pitting has removed most of the earlier levels

 Early occupation areas

HAMPTON COURT AGRICULTURAL ESTATE

Some notes by Mr J Wride on the Lugg Saw Mills Complex and extracts from Estate Ledgers

In August 1975 a small group attempted to make a detailed survey of the remains of these mills. The following is the result of that survey.

It is probable that these mills were constructed to provide finished building materials for the large reconstruction work carried out at Hampton Court by Sir Richard Arkwright.

The position of the mills is shown in fig 1, with what is part of Hampton Court appearing on the right-hand edge of the map. The track which runs from Hampton Court to the bridge over the Lugg might well have been the course of the tram road of 1835. Fig 2 is an enlargement of the mill complex taken from figure 1.

This article was written for use with photographs which I took at the time, and the numbers on figures 1 and 2 correspond with photographs which, unfortunately, cost does not allow us to reproduce. The descriptions, however, give an indication of what could be seen at the time, and a photographic record has been preserved for posterity.

Number one on fig 2 shows the site of the large water wheel. The archway through which the water came can just be made out and if one looks directly above this, part of the modern sluice gate mechanism can be seen. The opening to the right is the eel trap. There are some vertical slots in the stonework down either side so that some form of trap could be slotted in (wickerwork nets? In the Arkwright Building Ledgers there is a reference to an Eel trap at Hampton Bridge, and for 1833 says "putting in wicker work".

The site of the small water wheel is shown at figure 2. On the right can be seen the one remaining frame for the control sluices or floodgates. Also it can be seen that this frame is set at an angle of approximately 45 degrees. This strongly suggests that this wheel was a "Poncelet Wheel". This form of wheel is basically an undershot wheel, but because the sluices are angled instead of being vertical the water striking the wheel had more force. This form of wheel was developed by General S V Poncelet (1788-1867)* in about 1824 and was claimed to be 65% efficient. The wheel in question was constructed in 1836.

The Centrifugal Pump of 1851 was felt to be better described as a horizontal water wheel, and its position can be seen at fig 3. The water entered through the channel which is just visible in the back right-hand corner and drained out through a sump in the centre of the circle. A vertical rack and pinion was used to control the floodgate for this wheel, what is left of the pinion and hand wheel can be seen and is just visible directly above the inlet channel.

Fig 4 shows the exit for the water from all the wheels back to the river.

Fig 5 shows the entrance to the water course for the small water wheel. This water course would seem unusual in that the water had to turn a 90 degree corner before coming to the wheel. The sluice gate for the large water wheel is just to the right.

The bone crusher of 1864 is assumed to have taken the form of an enlarged cider mill, and at fig 6 are two stone wheels of approximately 3' 0" diameter which are thought to have formed part of this machinery. It is interesting to note that the markings on the sides of these stones suggests that they may once have been used for grinding grain.

The Mess Room, built in 1865, has a large fireplace on the wall to one's left as the building is entered. Running round the rest of the three walls is a low, built-in bench.

The bridge of 1851 is probably the iron bridge across the river by the mills. The plan shows the surprising length of this single span bridge. Part of the weir can easily be seen but the greater part of it is completely under water and extends a little way past the bridge.

The crane as shown at figure 7 is probably part of this industrial siting but is apparently not mentioned in the Building Ledgers. A note was taken of the tree trunk which forms the jib. Under the corrugated roof is a creosoting tank.

* See note on General Poncelet at end of article.

**Extracts from the Estate Ledgers
Lugg Saw Mills and Machinery**

		£	s	d
1823	Making a shed at the Green for boards.			
1826	Green Woodshed. Making new shed.	24	15	8
1835	Building saw shed, lathe room, plaster room, making and fixing the large water wheel and bolts. Making stone saw, crane and shears. Sinking well and making pump. Making tramwagons, ladders and wheelbarrows. (Half the expense of the tram road charged to Hampton Court). Fitting up woodsaw and stonesaw.	1,911	17	10
1836	Building sheds, making and fixing small water wheel, fitting up vertical saw and stone drills. Raising the weir across the river. Making pit and lime runner. Preparing and fixing the mortar mill. Making sand washer and sand boxes. Fitting up stonesaws and the office.	869	16	11½
1837	Building the plaster oven and room, finishing lime pit and runner. Building new cabin Green Yard.	177	9	2½
1838	Building storeroom and repairing machinery.	298	9	10½
1839	Repairing and improving the internal parts of the machines.	162	12	4½
1840	Altering and repairing machines.			
1841	Making a new lathe room, fixing the lathes and the connecting machinery from the water wheel and repairing the rest of the machinery.	110	6	7½
1842	Altering and repairing the machinery.	102	16	9½
1843	Repairing the machinery. Starting joiners shop and under-building walls against water wheel.	29	1	11
1844	Repairing the weir, woodsaws, railroad, trams and wheelbarrows.	62	19	7
1845	Repairing the stone saws and the railroad. Cleaning and repairing lathes.	78	4	9½
1846	Repairing tram road. Repairing tiling on buildings and cleaning machinery and cabin.	38	8	4
1847	Repairing weir floodgates. Repairing mortar mill and stone saws.	44	16	9
1848	Repairing water wheel, mortar mill and other machinery.	22	17	7
1849	Repair roofs and tiling sheds and office. Erecting a new shed. Repairing water wheel, bolts, weir and machinery.	43	12	8
1850	Repairing water wheel, bolts and weir.	43	18	11
1851	Making footbridge across river; making fire place in cabin. Making centrifugal pump. Repairs to shed, stonesaws and machinery.	36	1	11
1852	New roof, tiling and repairs to carpenters shed and other sheds. Repairs to machinery.	73	10	8
1853	Repairing machinery, tiling and windows.	35	4	11
1854	Repairing machines, wheeling soil and piling (on) river bank opposite works.	62	14	0
1855	Repairs to machinery.	16	13	9
1856	Repairing machinery. Restoring footbridge across river. Repairing walls of timber yard, tiling on sheds, and erecting new shed for storing timber.	32	2	6
1857	Repairing machinery and tiling building.	18	5	11

		£	s	d
1858	Rebuilding glaziers shop, repairing bridge and machinery.	17	6	6
1859	Repairing tiling, stone saws, and machinery. Fitting up nail room.	66	16	0
1860	Repairing machinery, buildings, roads and fish trap.	39	10	10
1861	Repairs to weir, new flood bolts and frames. Embankment wall to river between stream and weir. Repairing large water wheel. New water wheel to stone saws. Taking down boat house and filling up cove. General repairs to eel trap and machines.	314	8	0
1862	Repair machinery and tiling on buildings.	97	5	6
1863	New course and stone walls to stream from large water wheel and eel trap, paving bottom of course with large thick stones. Repairing large water wheel and machinery.			
1864	A continuation and completion of works at mill stream. Repairs to machines, saws and cranes. New building for and fixing bone crusher. New timber shed. New roofing and tiling room for castings. New putty hole and drain. Repairing buildings over wood saws.	231	15	8
1865	Building new mess room. Building manure shed; rebuilding privy and repairing machinery.	162	14	2
1866	Repairing wall and tiling, timber track, stonewheel crane and machinery.	52	10	10
1867	Building shed for storing firewood and repairing machinery.	41	11	1
1868	New bolts to weir at river. Repairs to buildings and machinery.	47	11	11
1869	Repairing buildings, office, and machinery.	41	5	8
1870	Repairing walls, tiling, buildings and office. Making a tank and drain.	11	11	5
1871	Making paint room. Repairing roofs, tiling, sky-lights and windows and filling up sand pit.	22	19	6
1872	Repairing machinery roof, doors and spouting.	14	3	6
1873	Repairing machinery. Taking up old and fixing new water wheel.	156	7	4
1874	Repairing machines. Taking-down old lime shed. Repairing buildings and road. Fixing galvanised roof to shed.	40	19	7
1875	Repairing machines, and roof tiling on buildings.	9	10	2
1876	Repairing machinery.	8	5	3
1877	Repairing machinery.	7	2	7
1878	Repairing road and tiling on buildings.	14	17	10
1866-1867	Building room for fish ova, laying on water supply, making drain, trough and cistern.	137	2	8
1871-1876	Repairs.			

Interesting extracts from accounts for materials

		£	s	d
1835	Iron castings	40	0	0
	Circular wood saw	5	8	0
	Iron for railroad	11	9	4
	Saw files		15	9½

		£	s	d
1835	Oil for machines	2	14	0
	Oil tins		2	4
	Sand for sawing stone		15	0
	Cyder for workmen	12	1	0
1836	Castings and wheels	102	8	7
	Circular saw wood	4	4	0
	Castings for vertical wood saw	34	4	5
	Oil for machines	12	19	9
	Hair rope for pump		19	6
	Cyder	3	19	3
	Lifting tackle	150	0	0
1837	Large vice	2	15	0
	Castings for machines	8	0	2
	Vertical saw	13	15	2
1838	Drilling lathe	6	0	10½
	New patent vice	3	3	0
	Oil for machinery	19	14	0
	Oil cans		16	0
	Mill brasses		19	5
	Circular bellows	3	11	0
	Circular saws	8	3	0
	Cyder	3	18	9
1839	Castings	7	14	2½
	Hair rope for pump		18	0
	Beer for workmen	1	1	0
1840	Cyder		16	8
1841	Four spur wheels	2	11	0
1842	Files	7	5	0
	Wheels and pinions		17	2
1843	Castings	3	13	3
	Stone saw plates	10	17	3
	Cyder	2	1	8
1844	Files	3	18	9
	Circular saw	6	5	0
1845	Castings	1	14	11
	Stone saw plates	15	18	10½
	Circular saws	4	15	6
1846	Bradford oil cans		2	3
1851	Hodges for castings	2	19	6
1852	Hodges for castings	2	11	1
1853	Hodges for castings		1	6
1862	Paving and drain cover	3	4	8
	Spear and Jackson repairs to circular saws	1	1	0
	Hodges and Sons, castings for mortar mill	10	10	5
	Iron hurdles for gravel pit	26	5	0
1863	Hodges for brasses and castings	1	12	2
	Cyder	3	16	8
1864	Spear & Jacksons for circular saw	5	2	0
	Hodges		18	4
1865	Kempson & Curley survey & Plans of river at Saw Mills	6	6	0
	Hodges for Brasses	2	6	6
1871	W Barber, plumber	1	2	10

		£	s	d
1873	R R & W Miles, new casting for water wheel, hammered shaft and brasses	68	11	7
	R P Brown, screws and bolts		14	4
	J Price, cider		6	1
1874	R P Brown for corrugated iron roof	13	6	4
1878	Lambert, repairs to saws		14	4

General S V Poncelet (1788-1867)

Improved the under shot wheel to such an extent that it was claimed to have an efficiency of 65% for only small heads of water. Not more than 5½ ft was recommended. His most advantageous improvement was that of replacing the vertical control gate or sluice for one inclined at between 40 and 60 degrees to the horizontal (according to the diameter of the wheel and the effective head of water). A false board held back a head of water at the top while the bottom gate could be adjusted by means of a hand wheel, spur gear and rack for six or seven inches. Frequently it was constructed so that it could be regulated from inside the mill. One of the first to make this type of wheel in this country is said to have been Maggs and Hindley, a firm of water milling engineers of Bourton Foundry, Dorset.

Since the undershot wheel depends upon a force of water rather than an amount of water, the improvement was quite valuable. It meant that the miller had greater control over the speed of his wheel and over his use of water.

Of almost equal importance was Poncelet's improvements in the design of buckets. They were inclined at a tangent so that the water entered without shock, using velocity only, and not weight to turn the wheel. The radius of the buckets was usually made about one-eighth of the diameter of the wheel and there was no sole-plate or bottom to the buckets. This shape of bucket allowed them to glide out of the water with less resistance.

Undershot Wheels

The simplest and cheapest type of wheel was the undershot type. They were suitable for streams which provided only a small head or fall of water and were not, in their original state, highly efficient machines. Some of the mills mentioned in the Domesday survey are described as "winter mills" (molinum biemal), and it is suggested that this may refer to winter corn. It is very much more likely to mean that the wheels turned on streams which were either dry or at least low in water during the summer months.

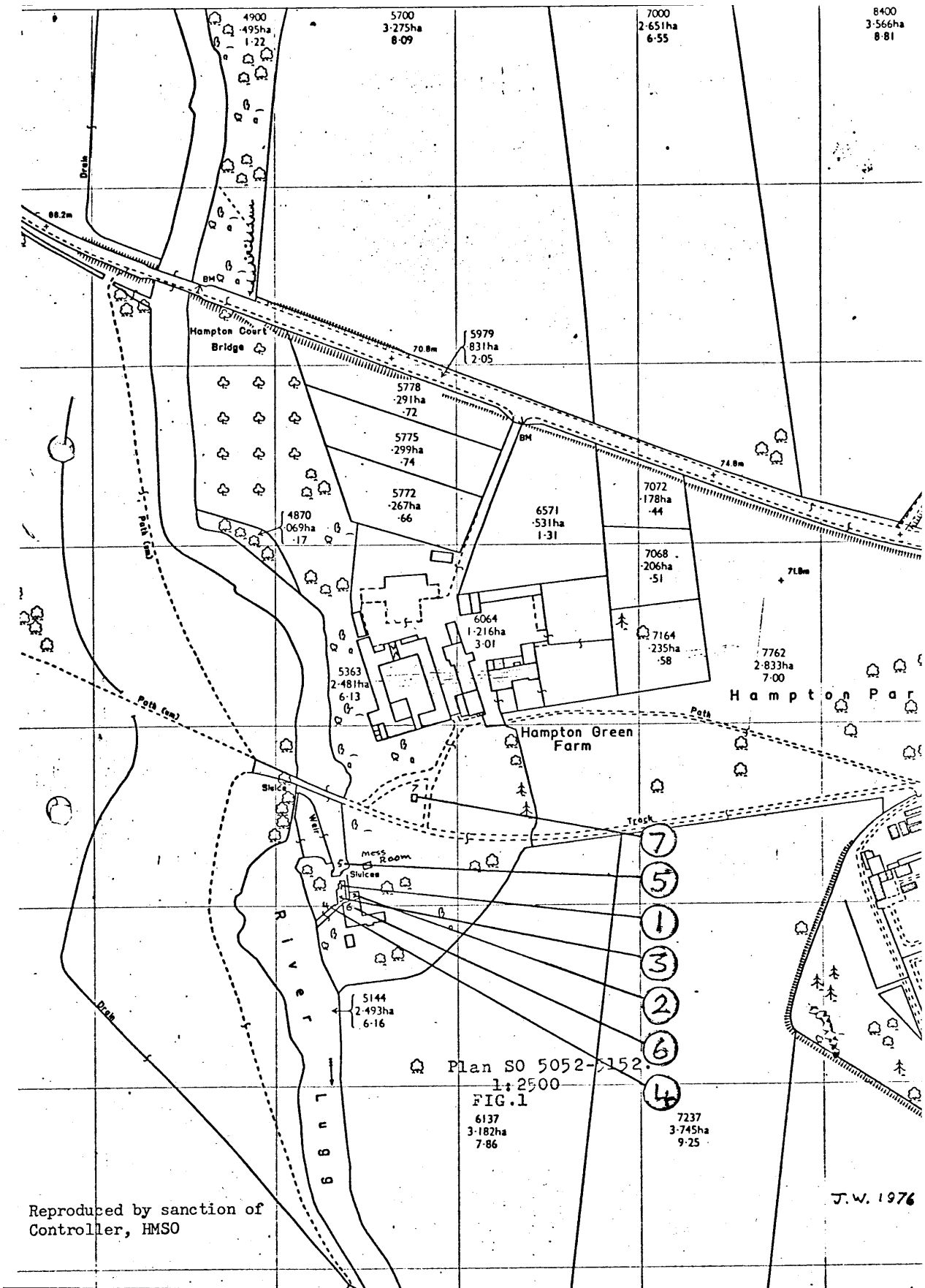
The stream of water running up to the wheel is known as the "mill race", or in some areas the "leat", and the stream carrying water away from the wheel as the "tail race".

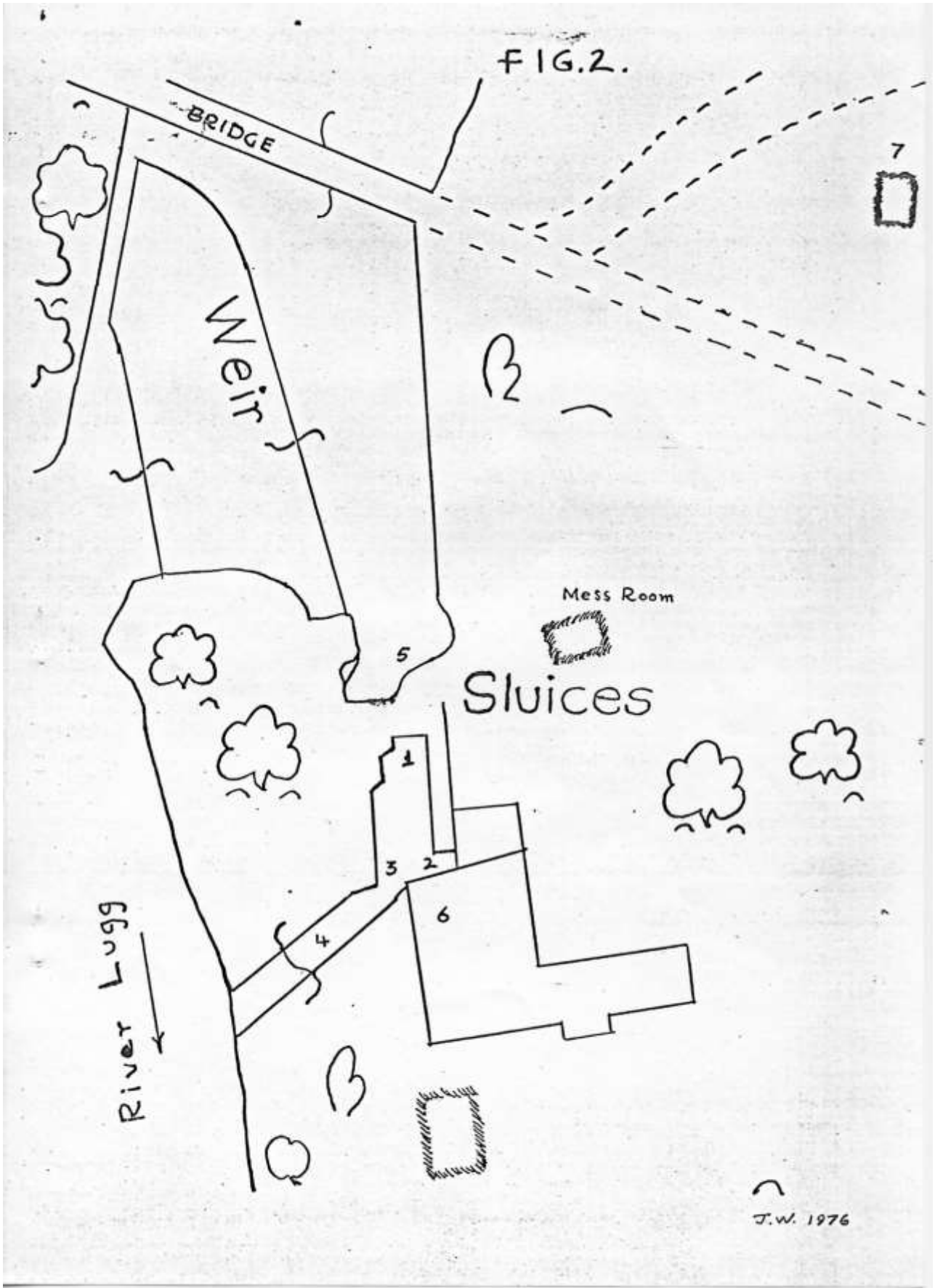
Early types had wooden rims, built up of felloes (the wheelwrights' term).

The inefficiency of the undershot wheel was largely due to either or both of two factors: loss of water at the sides of the wheel or the resistance of water below the wheel to paddles leaving the water.

Undershot wheels are usually of comparatively small dimension, but Smeaton did design one which was unusually large - 32ft diameter, 15' 6" wide. It had 24 floats, each 4' 6" deep, and was placed under the second arch from the south end of London Bridge in 1768, where it worked for the London Bridge Waterworks driving force pumps through wooden gearing until 1817.

John Wride, 1976





OFFICERS OF THE GROUP FOR 1977

Chairman: Mr G C Warren

Secretary: Mr C E Attfield

Treasurer: Mrs L Skelton,

Field Secretary: Mr L Skelton

Committee Members: Mr G Parker

Co-opted Members: Editor:
Mr C E Attfield.

Assistant Editor:
Mr R E Kay

Officers and Committee Members for 1977 – Notes

Chairman – Mr Geoffrey Warren

A member of the Section for about 3 years. Main areas of interest are early musical instruments and industrial archaeology, especially canals, and the Hereford and Gloucester Canal in particular; but is happy to be instructed in other periods and disciplines. Would like to see the field days properly organised by the leader in advance of the day, with an indication of the object to be achieved published in the Newsletter for the guidance of Members.

Employed by H P Bulmer Limited as Technical Manager, involved with Quality Control and other technical aspects of the production of cider and related products. Finds the county fascinating, but suspects he is still a committed "Towney".

MONKSBUURY COURT, MONKHIDE – SITE OF A HEREFORD AND GLOUCESTER CANAL LOCK? – FURTHER NOTE

Priestley's 'Navigable Rivers and Canals', 1831 was published before the second part of the H and G was built from Ledbury to Hereford, but it gives the distinct impression that the canal was already open! It gives the length as 35½ miles, and the following details on levels:-

" - from Hereford to Withington Marsh, six miles of level canal; from thence to Monkhide (which is a summit level at an elevation of 195½ feet above low water of the Severn) there is a rise of 30 feet in a distance of three miles; the canal continues on the summit level for eight miles and a half to Ledbury; ..."

Cohen ('The Herefordshire and Gloucestershire Canal', Trans Woolhope Club 36 (2) 167 et seq, 1959) states:-

"In mid October 1870, owing to drought, there was very little water in the "ten mile pound" between Withington and Ledbury; only very light loads could be carried."

However, to the East of Monksbury Court there appears to be a distinct change in level where the canal crosses the River Lodon. The 10 inch OS map (1928) also shows a feeder (?) entering the canal bed by a bridge. It is possible that this site was merely a supply point for a navigation which was chronically short of water, but it could have been the site of a lock.

The land used for a lock, based on the one remaining lock at Oxenhall, is considerable, the approximate dimensions being:-

Chamber length	24.5 metres
Chamber width	2.5 metres
Overall length	40.5 metres
Overall width	7.7 metres

G C Warren
16th May, 1976

