

Bradford's Brook, Wallingford

By A. J. GRAYSON

SUMMARY

The natural drainage of the Cholsey and Mackney meanders to the west of Wallingford was to an outlet to the River Thames 2.2 km. south of Wallingford. Ditches dug in the alluvium of the meanders led progressively to the capture of the headwaters of streams flowing from the chalk of the Sinodun Hills and the Berkshire Downs. The stream so created, the Mill Brook, flowed to the Thames at Wallingford. The dates of these drainage works range from Anglo-Saxon to Norman. The principal use made of the first stream capture was to fill the moat surrounding Alfred's burghal fortifications at Wallingford. Later work extended the system of captures, with completion of the system after 1086. Navigation on the system westward from the western edge of Wallingford occurred from the late 17th century but would have been equally possible in medieval times. It is suggested that Bradford's Brook was dug principally to relieve Wallingford of winter flood waters, and made possible a new mill at Winterbrook. It is likely that King Henry I made this ditch, known as Winterditch, serve as the boundary of the new parish of St Lucian of Beauvais, thus marking the date of the current parish boundary of Cholsey. Piping of the eastern section of the Mill Brook in 1972 led to all the waters first captured in the 9th to 12th centuries passing along Bradford's Brook.

Mill Brook is the name given to the stream which until recently flowed from Blewbury through South Moreton and Hithercroft to Wallingford (Fig. 1). The brook, at different points known as Mill Brook, Padsey Brook,¹ Mill Ditch and Mackney Brook, until 1972 flowed through the western outskirts of Wallingford, to enter the Thames near St Leonard's church.² In 1972 the brook was piped from a point 600 m. east of its confluence with Bradford's Brook. Much of the brook's course and that of Bradford's Brook are artificial. The questions arise: when and why were these various alterations to the natural drainage undertaken?

HISTORY OF THE COURSE OF THE MILL BROOK

From its source in Blewbury, the Mill Brook, enlarged by tributaries on its left bank, once joined an earlier course of the Thames at South Moreton. In late Pleistocene times, a proto-Thames flowed across the Gault east of Didcot and north-west of South Moreton (whether or not this was the only course of the Thames at the time is uncertain).³ Its course then meandered round Mackney, with a further meander circulating round Cholsey Hill.⁴ When this course was abandoned and the Thames took its present channel, tributaries of the present-day Mill Brook continued to flow through the meander channels emerging to join the Thames at Bow Bridge (map reference SU606868) (Fig. 2). It should be emphasised that the lines of streams shown in this figure are indicative only, reflecting the channels of

¹ Ordnance Survey 1 inch to 1 mile map, Wallingford (1831).

² J. and S. Dewey, *The Book of Wallingford* (1977), 102.

³ A. Horton, *Cholsey Hill*, Guidebook for Excursion A 5, SE England and the Thames Valley (International Union for Quaternary Research, 1977).

⁴ D. Wilson, A. Horton and J.D. Cornwell, *Henley-on-Thames 1:50 000 Sheet 254, Solid and Drift Geology* (British Geological Survey, 1980).

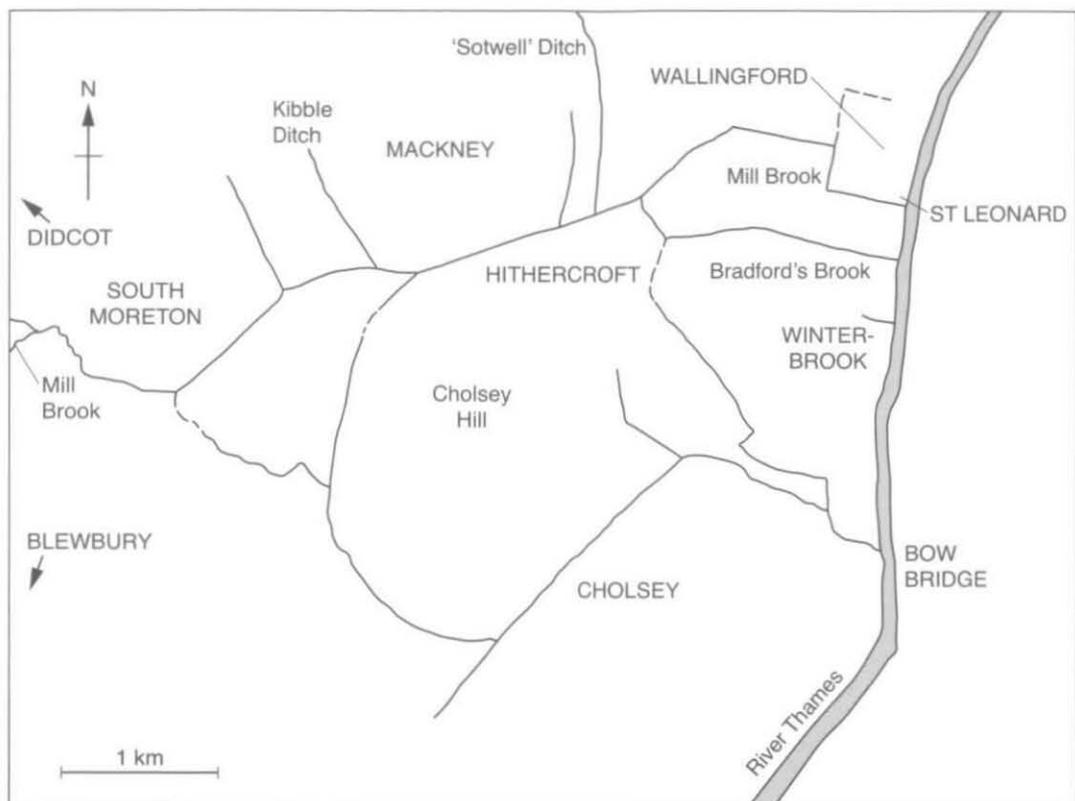


Fig. 1. Stream system west of Wallingford before 1972: broken lines indicate ditches only filled in times of flood.

present-day drains; the land would have been marshy, and any earlier streams would have occupied somewhat different courses and would frequently have interweaved. The system's main component was a stream flowing from Blewbury towards South Moreton, turning south-east to skirt Cholley Hill. The second largest stream of the system was the Kibble Ditch flowing southward to the east of South Moreton and thence west of Cholley Hill. Thirdly, a brook from Sotwell ran southward past Hithercroft Farm (SU590888) to join that stream in the ground lying to the west of Bow Bridge.

The courses of the latter two streams, as in part of the Mill Brook upstream from South Moreton, were in alluvium laid down in Bronze Age and Roman times.⁵ An important feature of this alluvial land is its flatness. The level at Hithercroft (SU598895) is at 47.0 m., while the land at road level by the Mill Brook in South Moreton (SU563880) is at 48.3 m, implying a difference of 1.3 m. in levels over a distance of 4 km. Over a distance of 2100 m. the gradient of the ditch on the west of Cholley Hill is similar at 1:3000.⁶ Concerning the

⁵ M.A. Robinson and G. Lambrick, 'Holocene Alluviation and Hydrology in the Upper Thames Basin', *Nature* 308, 809-14.

⁶ Cholley Brook survey (Thames Water Rivers Division, 1985).

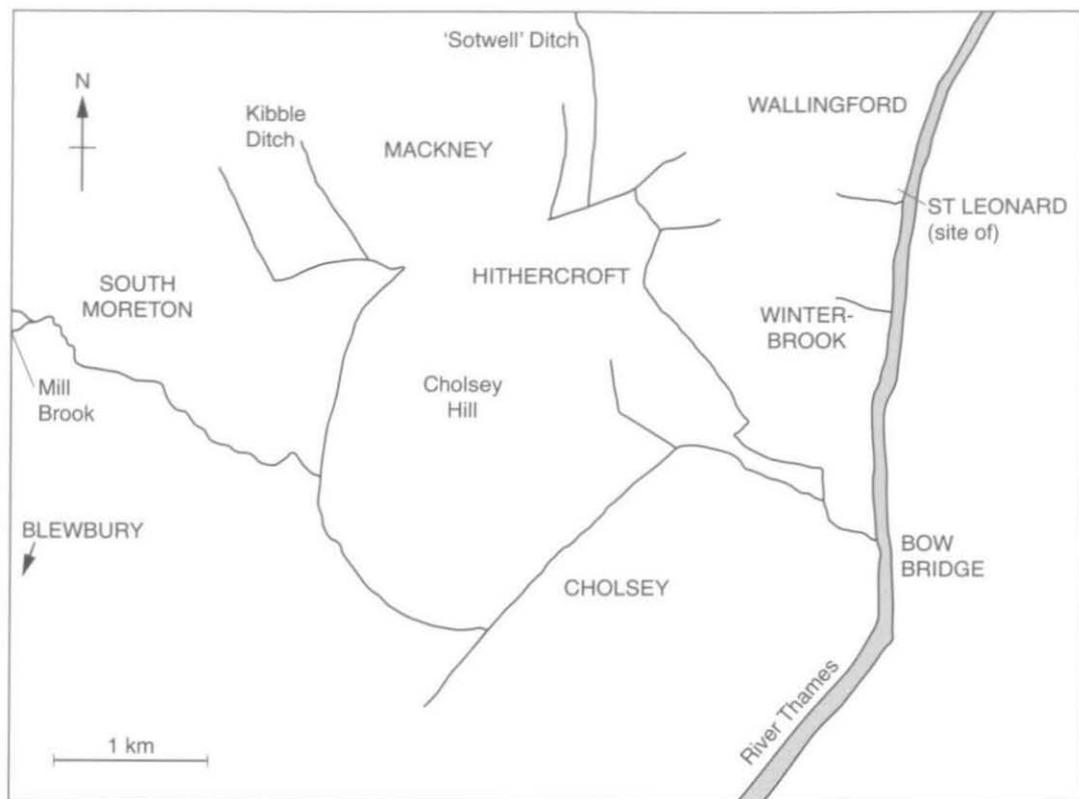


Fig. 2. Illustrative diagram of natural drainage before man-made captures.

development of drainage to the east of Mackney, Debney (pers. comm.) notes: 'Originally Sotwell spring and any waters from the marsh between Cholley and Mackney 'islands' would also have drained southwards through the alluvial channel at Old Hithercroft Farm to the east of Cholley Hill, joining the other channel near Brook House [SU595875 - A.J.G.]. This would have been the first source of water to be captured and diverted to Wallingford.' Here the reference is to man-made capture (Fig. 3, stream 1). This capture is not immediately obvious on the ground owing to the flatness of the terrain, but is confirmed by inspection of OS spot heights and the survey conducted when the channel was piped.⁷

To the west of Mackney, as already noted, the Kibble Ditch flowed originally south and thus to the west of Cholley Hill, being joined by the stream from Blewbury at a point to the south-east of South Moreton (SU570873).⁸ The old course of the ditch was probably the eastern boundary of the Hundred of Blewbury opposite Cholley, as recorded in a charter of

⁷ Thames Conservancy, December 1971.

⁸ G. Howat, in *A History of North Moreton* (2000), notes that the name 'Kibble' is derived from the Anglo-Saxon *gybhid*, *gibb*, meaning 'dirty'.

942, although the actual name *tibbaelde* or *Kibble* is not recorded in that charter.⁹ The name 'Kibble' is almost certainly remembered in the present-day naming of a wet corner by the junction of the Wallingford railway with the main line at a place in Cholsey (SU45831864) called *The Bull's Hole*.¹⁰ This can be identified with the 'piddle called *Kebull*' noted in the 1550 manorial survey under the tythe of *Hyppe*.¹¹

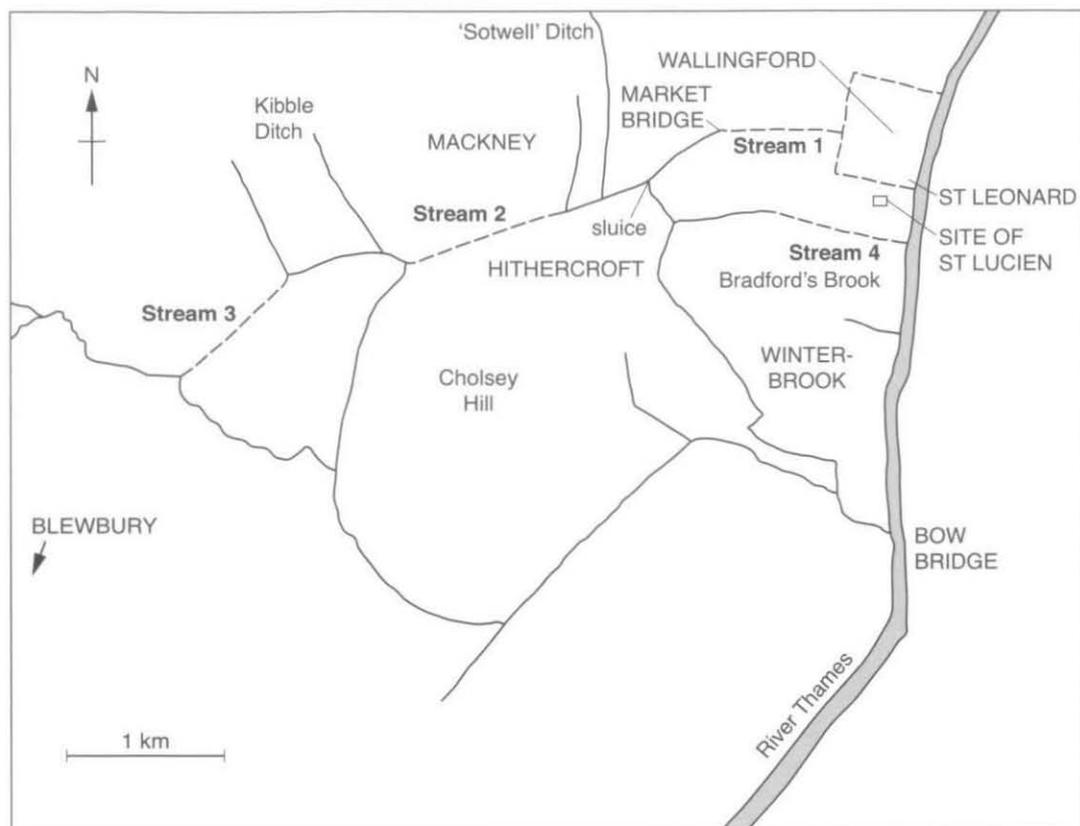


Fig. 3. Plan of successive captures.

⁹ This is the date ascribed to Birch Cart. Saxon. 801 by S. Kelly in *Anglo-Saxon Charters* vol. 7, *Charters of Abingdon Abbey* (Brit. Acad. Anglo-Saxon Charter Series, 2000), 153.

¹⁰ J. and S. Dewey, *Change at Cholsey Again!* (2001), 199.

¹¹ Manorial survey of Cholsey, 1550, P.R.O. Sc12/5/25. Transcribed by J. and J. Money.

The Kibble Ditch was diverted by man eastwards to join the Sotwell water (Fig. 3, stream 2).¹² This stretch of the Mill Brook is obviously man-made, as evidenced by its course, which lies in a channel above the level of land to its south. The stream running southward along the eastern edge of South Moreton was also captured, though whether at the same time that the Kibble Ditch was beheaded or later is unclear. The brook's course on this section to its junction with the Kibble Ditch runs in a deepened meandering channel following the line of an earlier small stream with its source in the gravels on which South Moreton lies. Finally, a very obviously man-made ditch was dug to a point (SU15574880) south of South Moreton church to capture Blewbury water (Fig. 3, stream 3).

The contributions of these three diversions can be estimated approximately by reference to the catchment area of each successive capture.¹³ On this basis stream 1 accounts for 6 per cent of the current flow of the Mill Brook at Hithercroft, stream 2 for a further 22 per cent and stream 3 for 72 per cent. Dating of these three stages of creating the Mill Brook, and particularly the last, is essential to the determination of the earliest possible date for excavation of Bradford's Brook (Fig. 3, stream 4).

Dating the diversions

A charter dated between 879 and 899 records the transfer of Cholsey to King Alfred from the Bishop of Winchester.¹⁴ The Cholsey boundary to the north of Cholsey Hill and eastward is described as being 'through the marsh to Tibbaelde stream [Kibble Ditch], to Maccan Island [Mackney], along the marshy ground, then to the old dike east to Tamese [the Thames] at Welingaforde [Wallingford]'.

The reference to the 'old dike' as the boundary between Cholsey and Wallingford is important. There can be little doubt that this is stream 1 (Fig. 3). There is no evidence for any other line than that of the Mill Brook, flowing to Wallingford via Market Bridge. This man-made ditch would be of obvious value in filling the moat surrounding Alfred's fortifications of the burh; indeed its position may well have helped to determine the position and layout of the burh's banks. One arm of the brook was led along the south side of the burh, past the South Gate thence to reach the Thames at St Leonard's, where the then parish boundary with Cholsey is indicated by the position of the old Berkshire-Oxfordshire county boundary. The second, to the north, reached the Thames via a culvert below the North Gate.¹⁵

Stream 2 is recorded in a charter (BCS 810) dated 945¹⁶ as a ditch, but this charter is regarded by Gelling and by Edwards¹⁷ as doubtful and spurious. Despite this judgement, the line of the boundary, especially here where the possibility of an alternative line is remote, may be accurate, although description of its state, namely whether stream or swamp in the 10th century, may be unreliable. A charter (BCS 988) of 957, which is considered authentic, describes the boundaries of Sotwell and records this stretch as a marsh. It is highly unlikely

¹² This diversion has led to confusion over the naming of streams. M. Gelling, in *Place Names of Berkshire*, part iii (1976), discussing Kibble Ditch and tibbaelde lace, notes that 'Ekwall and Forsberg consider that tibbaelde must be connected with gybhild. It seems clear from the boundaries, however, that tibbaelde lace is a different stream, not named in the Ordnance Survey maps, which forms the northern half of the West boundary of Cholsey and flows into the Mill brook from the South'. However, in Saxon times they were indeed the same stream flowing south to the west of Cholsey Hill and then to Cholsey.

¹³ Calculated from data in G. Roberts, 'The Hydrology of the Mill Brook', (unpubl. report, 2001).

¹⁴ M. Gelling, *Place Names of Berkshire*, part iii (1976), 757 (refers to *Birch Cart. Saxon.* 565).

¹⁵ N.P. Brooke, 'Excavations at Wallingford Castle, 1965: An Interim Report' (*Berks. Archaeol. Jnl.* 62), 17, describes the culvert carrying water from the 'town ditch'.

¹⁶ M. Gelling, *The Early Charters of the Thames Valley* (1979), no. 37.

¹⁷ H. Edwards, 'The Charters of the Early West Saxon Kingdom' (B.A.R. British Series, 198), 178-9.

that stream 2, once cut, would have been allowed to deteriorate to the point that the area between Cholsey Hill and Mackney would revert to a swamp – thus indicating this cut as having been made later than 957.

At the western end of stream 2 the Mill Brook follows the line of a natural stream running out of South Moreton's gravels to the Kibble Ditch. It was clearly incised more deeply by man. Domesday records one mill in South Moreton on William Lovett's land, which the V.C.H. identifies as being later named Sanderville, the manor house of which was located in the moated area on the eastern edge of South Moreton.¹⁸ The value of this mill is listed in Domesday at the standard value of mills in Blewbury Hundred, namely 12s. 6d. Others in the vicinity and ascribed the same value were at East Hagbourne, Blewbury (average of three) and North Moreton, while West Hagbourne was set at 12s., the mill at Sotwell at 15s., and that at Brightwell at 20s. Some indication of the reasonableness of mill valuations, at least in relative terms, is provided by the figure for Cholsey. Here there were three mills, the locations of which have been determined. The combined value of 62s. can only be understood as reflecting the contribution of three relatively large mills, two of which would have been served by Blewbury water if this had not been already captured by 1086.

Assuming that the standard 12s. 6d. value ascribed to the South Moreton mill reflects the existence of a typical Berkshire mill of the time, it is highly improbable that the mill at South Moreton was powered by the volume of water provided by Blewbury and its west bank tributaries. The source of its water was doubtless the ditch running close to the edge of the gravel to the east of South Moreton. Despite Blair's reminder that Domesday should rarely be used as negative evidence, it must be remembered that mills were valuable assets.¹⁹ Added force is given to this argument that Domesday refers to the only mill at South Moreton by the reference to the 'west mill' in 1396; this was the site of a mill up to the 1920s, located 450 m. south-west of Sanderville and presumed to be so named in contradistinction to the eastern site of the earlier mill.²⁰ Following this argument, the digging of stream 3 beheading Blewbury and East Hagbourne waters occurred after 1086.

The use of a source of water for the establishment of a mill or mills in Wallingford must have figured large in the minds of those digging the successive ditches. However, Domesday records only one mill in Wallingford. After Domesday, the earliest record of a mill is for 1190, this presumably, though not certainly, being sited below the castle wall.²¹ Pedgley (pers. comm.) notes that there were mills in two places: just outside the South Gate (powered by the Mill Brook), and by the bridge, 'under the castle' (powered by the Thames). Both were Crown estate. The earliest available reference to Southgate Mills as such is in 1355.²² Later, in 1568, Nicholas Payne acquired a 30-year Crown lease of these mills and subsequently converted them from undershot to overshot, resulting in complaints in 1579 of repeated flooding upstream as far as South and North Moreton.²³ As to other mills, by 1385 there is a reference to the 'site of the watermill under the castle', so presumably it had ceased to function by then.^{24, 25}

¹⁸ V.C.H. Berks. iii, 499.

¹⁹ J. Blair, *Anglo-Saxon Oxfordshire* (1998).

²⁰ V.C.H. Berks. iii, 499.

²¹ Pipe Roll 2 Rich I. I am indebted to D. Pedgley for this reference.

²² Black Prince's Reg. 1351–65 part iv, 173.

²³ P.R.O. E 310/8/ 8, No 8 Augmentation Office. Particulars for leases; P.R.O. E163/14/2 21 Eliz. I letters respecting mills at Wallingford.

²⁴ Calendar of Inquisitions Post Mortem Hen. III - Hen VII 16:112, Extent at Wallingford 14 Oct. 9 Rich II.

²⁵ Pedgley observes that references are sometimes to 'mill' and sometimes to 'mills'; a 'mill' is very likely the mechanism for a single grindstone, with sometimes more than one grindstone under the same roof.

It would be surprising if at some early stage there were not a mill site at the terrace edge north of the castle site, subsequently covered over in Henry III's reign by the building of the outermost castle wall and earthworks, opposite the later site of Pollington's weir.²⁶ But there is no evidence of such a location. Water for the earliest mills below the castle and close to Wallingford Bridge may well have been taken from a brook running along the west side of the King's Meadow, having been led off the Thames from a point 2.5 km. upstream of the bridge.

In summary, it is suggested that Alfred used water from stream 1 for the moat surrounding the burh. When defence of Wallingford shifted to dependence on the castle rather than the Saxon town banks, water would still be essential to fill the moat, or, later, moats. Capture of more water by means of stream 2 and, later, stream 3 would have supplied these needs. In fact, the demands of the moat system were not so great as to limit the availability of water for other purposes, such as milling, brewing and other industry. Hedges refers to an inquisition in the reign of Philip and Mary which reveals that just outside the western bank of the Saxon burh water was kept back by sluices and was ordered to be turned into the dyke alongside the castle from Saturday noon to the following Sunday evening, water being directed to the Southgate Mill during the week.²⁷

THE INTRODUCTION OF BRADFORD'S BROOK INTO THE DRAINAGE SYSTEM

There is no evidence of the existence of what is now called Bradford's Brook (Fig. 3, stream 4) in Anglo-Saxon times.²⁸ The earliest references to this name, presented in various spellings, occur in the early 16th century.

The first point to note is that Bradford's Brook, like Mill Brook on its route into Wallingford (stream 1) and streams 2 and 3, is man-made. No natural stream could have cut through the river gravels of Terrace 1b²⁹ which was laid down ~ 30,000 years BP.³⁰ The first 300 m. of the brook's course follows that of the beheaded Sotwell Ditch. Turning to the east it then follows a line previously occupied by a small stream flowing *west* out of the gravels of south Wallingford, which joined the old Sotwell stream in its southerly course.

Evidence concerning a ditch known as Winterditch, which is taken to be Bradford's Brook, includes the following sources:

- a. A grant of land which is undated but is believed to date from 1250 reads '(i) Godfrey son of Nicholas Merchant of Winterbrook to (ii) Ralph of Winterbrook, Chaplain Grant for one mark and services and an annual rent of 4 pence at Michaelmas 1 acre of arable land in the field of Winterbrook between land of Andrew of Winterbrook and of Anketil Paler, abutting on Winterdich.'³¹

²⁶ E.S. Thacker, *The Thames Highway*, vol. ii: *Locks and Weirs* (1968).

²⁷ J.K. Hedges, *The History of Wallingford* (1886), vol. ii, 189.

²⁸ It should be noted that Bradford's Brook is not the origin of the name of Winterbrook, the settlement lying immediately south of Wallingford. This name is more likely to refer to a stream, now found only as a ditch, entering the Thames 300 m. south of Bradford's Brook (J. Souster, 'Winterbrook', *Wallingford Magazine* (May 2001)). In addition there is no evidence to support the idea advanced by Gelling (*Place Names of Berkshire*, part ii, 535) that 'If Welingaforde in the lands of Cholsey and Moulford in BCS 565 refers to the actual ford, this was where Bradford's Brook flows into the Thames, opposite Newnham farm, 1/2 mile South of Wallingford Bridge. There is no modern road on this route'. There is, however, no evidence that there was ever a ford or road at the junction of Bradford's Brook with the river.

²⁹ Wilson, Horton and Cornwell, *op. cit.* (note 4).

³⁰ D.R. Bridgeland, *Quaternary of the Thames* (1994).

³¹ Grant of land, 1250, B.R.O. W/R RTb113.

- b. A charter of 1325 referring to 'half acre arable headland in Portmanfeld abutting on Wynterdych' shows that there was a ditch to the south of Portmanfeld.³² This field, which is the area later known as Wallingford Field, is bounded by Bradford's Brook. Taken together with the preceding reference this makes clear that Winterbrook was a settlement in the 13th century and that there was a ditch which separated Winterbrook, and hence Cholsey, from Wallingford.
- c. A further reference to the same half acre 'abutting south on Wynterdych' occurs in 1337.³³
- d. The first appearance of the name Bradford's Brook occurs in 1505/6 (as Battefords Broke) in a Latin MS.³⁴ Several other references arise in the early part of the 16th century, largely concerning complaints about failure to keep the ditch clean at Tadsey. In 1830 the name 'Tadsey' formed part of the names of seven fields between Cholsey Hill, Mackney and Wallingford.³⁵ Only one, however, runs alongside Wallingford Moor; this is alongside the stretch of Bradford's Brook running south-east from the Hithercroft sluice (Fig. 3).
- e. Disbury describes various preparations against Parliamentary forces made at the time of the Civil War.³⁶ The wording of his source leaves some aspects, such as the precise stream referred to as 'the river', unclear (see Griffin quotation below) but it appears from the context that 'river' alludes to the Mill Brook, stream 1. 'The brook from Blewbury was deepened and about a mile from the town a sluice was made that could easily be pulled up and down to fill the river [*sic*] or let it run dry.'
- f. Griffin quotes directly from the contemporary (1643) journal of Samuel Luke on the sluice that is the crucial construction affecting Bradford's Brook (see Fig. 3).³⁷ Thus from page 81 of Luke: 'The brook round town is very deep from Blewbury and Morton fills the moattes about them castle with water and there is a place 1 mile beyond the town called the lock. This sluice may be pulled up so they cannot have any water but from the Thames and by that means the river [that is, the dyke leading to the town - A.J.G.] may be made dry.'
- g. Dewey and Dewey include a re-drawing of the Cholsey Estate map of 1695 which clearly indicates the estate's northern boundary running along Mill Brook and thence Bradford's Brook.³⁸ The lower section of Bradford's Brook is shown as the stream flows today and a detail such as the slight kink in the stream 150 m. from the Thames is clearly mapped. This suggests that the map was an accurate representation.³⁹
- h. The description of Cholsey manor in the survey of 1550 includes the same field names bordering the northern extent of the manor as shown on the 1695 map, indicating that this northern boundary was at Bradford's Brook and its date was certainly pre-1550.⁴⁰

³² Private charter, 1325, Wallingford Museum W/Rtb 59.

³³ Private charter, 1337, Wallingford Museum W/Rtb 70.

³⁴ Charter, 1505/6, B.R.O. W/JBC/7.

³⁵ J. and S. Dewey, *Change in Cholsey: A Thousand Years of Village Life* (2001), 51.

³⁶ D.G. Disbury, *Beef, Bacon and Bag Pudding: Old Berkshire in the Civil War* (1978).

³⁷ S. Griffin, *Wallingford in the English Civil War* (2000).

³⁸ Dewey, *op. cit.* (note 35).

³⁹ The present-day curve at the junction with the Thames is not shown. F. Law (pers. comm.) suggests that this may be a recent variation associated with the building of a ferryman's house beside the river.

⁴⁰ Manorial survey of Cholsey 1550, P.R.O. Sc12/5/25 Transcribed by J. and J. Money.

- i. Rocque's map of Wallingford shows the brook as running its present course until in the neighbourhood of Chalmore Gardens (south of St Leonard's) it is mapped as taking a sweep to the north to join the Thames at the very point where the county-cum-borough-cum-parish boundary meets the west bank of the Thames.⁴¹ Such a course is at variance with the 1695 map, although this need not mean that at some stage in the 18th century a new cut had not been made, so reducing the gradient of the lowest stretch and making haulage of barges feasible. While the accuracy of some elements of his map of Wallingford is questionable, Rocque's line for Bradford's Brook on the Brightwell sheet appears to be accurate. Thus only a hint of hedgerows or lines of trees, with no stream marked, is shown in the place where Bradford's Brook runs on a south-easterly course from the junction with the Mill Brook. This feature may well be realistic.⁴² In 1508, referring to the same section, the Wallingford court rolls relate that 'the jury presents that the bancks by twene portmansmore and Tadsey ys broken that the water gothe from the mill in defaute of William Aldeworth.'⁴³ A similar complaint in 1518 mentions the effect on 'the farmer of Cholsey'. Bearing in mind these complaints about the brook overflowing in this upper section between Wallingford Moor and Tadsey 253 years earlier, it could be that the present-day deep cut had not been made and the area was indeed marshy, and much like the present-day condition of the land to the south of the point at which Bradford's Brook turns east.
- j. Thirty-nine years later an indenture⁴⁴ mentions Bradford's Brook and a former osier bed, suggesting the stream flowed in earlier years at least.
- k. In 1831 the Ordnance Survey marked Bradford's Brook and showed a stream, though inaccurately, along the line of the cut into the town, that is Mill Brook (stream 1).⁴⁵

DATING BRADFORD'S BROOK

Since Bradford's Brook now forms the boundary between Cholsey and Wallingford parishes, evidence on the timing of extension of a pre-existing parish or the creation of a new one must determine the latest date at which the brook was dug. There would have been no reason on grounds of water management to dig out a ditch 2 km. long until after completion of stream 3 of the Mill Brook system, which more than trebled the flow into Wallingford after 1086.

It is suggested that the key to the dating of Winterditch/Bradford's Brook lies in the creation of a new parish with its church '5 poles (21 m.) southward of the Almshouses the ground extends as far as the knowl in the footpath to Winterbrook'.⁴⁶ The parish of St Lucian's was established ostensibly to serve the needs of those living to the south of the Mill Brook, that is, outside the old burh boundary. The obvious southern boundary of the new parish would be Winterditch.

⁴¹ J. Rocque's Topographical Survey of Berkshire, Wallingford sheet (1761).

⁴² J. Rocque's Topographical Survey of Berkshire, Brightwell sheet (1761) Bodl. C 17 a.

⁴³ Court Rolls Wallingford 14 Sept. Hen. VII (1508), Wallingford Museum, W/Jbc/13.

⁴⁴ Indenture of 12 October 1810 between Lord Kensington and Thomas Greenwood, Robert Dalzell and Charles Greenwood, relating to Brook Lodge, Reading Road, Wallingford.

⁴⁵ OS 1 inch to 1 mile map of Wallingford (1831).

⁴⁶ Skermer, *History and Antiquities of Wallingford* (1712), transcribed by Messrs Pedgley and Sims.

Both the manors of Cholsey and Wallingford were occupied by the king in the relevant period. In 1121 Henry I established Reading Abbey. Hollister considers this to be Henry's first grand gesture towards the Church.⁴⁷ The loss of his wife, Edith-Matilda, who died in 1118, and his only legitimate son and heir Prince William, who drowned in 1120, rather than contrition of past misdeeds, constitutes, according to Hollister, reason enough for Henry to seek a fitting memorial to his family. The abbey's first stone was laid in June 1121. The Reading Abbey cartulary records the gift of Cholsey manor to the new abbey.⁴⁸ Later notifications and grants relating to the Abbot of Reading and his duties in regard to Cholsey were also recorded.⁴⁹ If a new parish were to be created to meet the needs of an expanding population to the south of Wallingford burh wall by carving out part of St Mary's, Cholsey, this would have been the convenient time to do it.

No record of the date of formation of St Lucian's has been found. However, three facts point to a date before and close to 1121. Firstly, as already noted, Reading Abbey was founded in 1121 and Cholsey along with other manors was given to the abbey. Secondly, the gifts of three parishes, St Lucian's, St Leonard's and the chapel at Sotwell, were transferred to St Frideswide's in Oxford in 1122. Hollister⁵⁰ notes that the priory of St Frideswide seems to owe its foundation to the early efforts of Roger of Salisbury, the king's justiciar, 'but Henry, who endowed the canons substantially [with the three Wallingford parishes – A.J.G.] in 1122 is claimed as the legal founder'. Blair points out that Roger replaced the minster priests of St Frideswide's with Augustinians in 1120.⁵¹ It is clear that major reshaping and strengthening of the Church in Reading and Oxford was undertaken in the years 1120–1122. Thirdly, there is the matter of the choice of patron saint. There are two plausible candidates. The list of relics passed to Reading Abbey confirms that it was St Lucian (or St Lucien as the French and no doubt Henry would have it) of Beauvais rather than St Lucian of Antioch (B.R. Kemp, pers. comm.).⁵² The reference to Lucian *and his companions* in the list implies the Beauvais saint. In Norman documents and legend the name Lucien of Beauvais is commonly associated with those of his companions, Maximien and Julian, martyred on the same day in c. 290. The three are alleged to have been missionaries from Rome, who were all martyred at Beauvais.⁵³

Unsurprisingly, no reliable particulars of Lucian are known, but his name nevertheless occurs in the calendar of the *Book of Common Prayer*. Baring-Gould⁵⁴ suggests that 'As little is known of the Saint Lucian, it is probable that the so-called Reformers retained his name in the Anglican calendar by mistake, confusing him with the Saint Lucian of Antioch (January 7th) a much better known saint.' The Sarum (former seat of the Bishop of Salisbury) Kalendar also shows his patronal date as 7 January, whereas the true date is 8 January.⁵⁵ Not all calendars incorporated this error: the 'Bosworth Psalter' in Canterbury, dated 988–1012, has St Lucian against 8 January.⁵⁶ As Lapidge points out, the dates ascribed to these

⁴⁷ C.W. Hollister, *Henry I* (2001).

⁴⁸ B.R. Kemp (ed.), *Reading Abbey Cartulary* (1986), Camden Soc. Papers vol. 31.

⁴⁹ *Ibid.* vol. 33.

⁵⁰ Hollister, *op. cit.* (note 47), 398.

⁵¹ J. Blair, *Anglo-Saxon Oxfordshire* (1998).

⁵² List of relics of Reading Abbey (late 12th century), MS B Lib, Egerton no. 3031, ff. 6v.– 8r., 7r., left col.

⁵³ <http://perso.wanadoo.fr/vivreloeuilly> (accessed February 2005)

⁵⁴ S. Baring-Gould, *The Lives of the Saints* (1899).

⁵⁵ F. Wormald (ed.), *English Kalendars before AD 1100* (1934), 969–78; D.H. Farmer, *The Oxford Dictionary of Saints* (2000).

⁵⁶ Wormald, *op.cit.* (note 55).

calendars are not always the dates of the final version of the document.⁵⁷ Folios 152v.–154v. of the Sarum Kalendar, where St Lucian and his companions are recorded, date from the 12th century.⁵⁸

Lucian of Beauvais was hardly a well-known saint. Twenty-four churches and two parishes in the diocese of Beauvais have him as their patron, and there is a single town in Eure et Loir named St Lucien, although whether this is named after the Beauvais saint is unclear. This appears to be the extent of current use of his name in sites in France. This comparative obscurity, combined with the fact that not a single dedication to the saint remains in Britain, might be thought to make the choice of this patron in Wallingford hard to explain.^{59, 60} This need not be so; as Jones (pers. comm.) points out, it is more important to recognise what a saint represents than who he is.

The legend, derived from a number of sources none of which have any particular claim to reliability, of the saint's martyrdom is relevant.⁶¹ After being beheaded by a Roman soldier, and carrying his head in his hands, Lucian continued down to a river, which a washerwoman helped him cross by throwing a sheet to the opposite bank. He repaid her by creating 2,000 metres (*sic*) of fabric as fine as any made in Beauvais, the cloth-manufacturing town par excellence. He continued on his way up to the hill of Notre-Dame du Thil. At the foot of the hill he laid down his head, indicating that he wished to be buried there. An abbey was founded at his burial place, where pink and red eglantines flourish. His severed head possesses beneficent powers and legend has it that it protects from evil those who venerate it. (The website *catholique-beauvais*⁶² records a broadly similar, though slightly less dramatic, version of the legend. The saga is reminiscent of that of another cephalophore buried by a river, namely St Freomund of Cropredy. Relating this legend, Blair⁶³ emphasises the importance of such stories as providing a focus for popular rituals and encouraging coherence within the parish concerned.)

The church of St Lucian's, Wallingford, of which no visible remains exist, was sited 200 m. from the Thames.⁶⁴ Four reasons may be adduced for the choice of location. First, the site was relatively prominent, being on the side of a small knoll, as later records have it,

⁵⁷ M. Lapidge (ed.) *Anglo-Saxon Litanies of the Saints* (Henry Bradshaw Society, 106, 1991).

⁵⁸ 969–978 *Kalendar of Salisbury*, Salisbury Cathedral Library MS 150, ff. 3–8b (Henry Bradshaw Society, 72), 16.

⁵⁹ F. Arnold-Forster, *Inventory of Church Dedications in England and Wales* (1899) mentions the church at Farnley Tyas in the West Riding as dedicated to St Lucian; this is an error. The current name, given to the church which was built in 1840, is St Lucius; Crockford's shows it as St Lucias. More fundamentally, the church is not a medieval dedication (H.E.C. Stapleton, pers. comm.).

⁶⁰ The dismissive attitude towards the saint is reflected in an article by F.H. Notice 'Les pères dans la foi', *Analecta Bollandiana*, 99. The author asks why, in a collection of saints, Lucian's and Marcien's passions continued to be recorded, saints 'to whom Père Delehaye accorded a lower value'. (Maximien is spelt Maxien and Marcien in different texts.) H. Delehaye, *Les origines du culte des martyrs* (Société des Bollandistes, 1933), makes not a single reference to Lucian of Beauvais in a work which refers to some 1,500 saints of the western and eastern churches.

⁶¹ <http://perso.wanadoo.fr/vivreloueilly> (accessed February 2005).

⁶² http://catholique-beauvais.ccf.fr/histoire/temoins/Saint_Lucien (accessed February 2005).

⁶³ Blair, *op. cit.* (note 51), 75.

⁶⁴ In 1320 a petition was made to re-amalgamate the parish with St Leonard's. The register of Roger Martell, Bishop of Salisbury 1315–30, records that a request came from the prior and convent of St Frideswide's, patrons of the churches of St Leonard and St Lucian, to unite the two churches, 'because the revenue had become so slight that they were scarcely sufficient to maintain one chaplain' (K. Edwards (ed.), *The Registers of Roger Martival, Bishop of Salisbury 1315–1330* (The Canterbury and York Society, 55, 1959). In fact there were still two churches in 1329, but presumably the building was allowed to fall into disrepair.

and thus safely beyond the reach of floods.⁶⁵ The association with the hillock in an area of river meadow land with few eminences, combined with proximity to a river, constitute a basis for choosing Lucian as patronal saint. Secondly, the saint's feast day, 8 January, is close to the common date of peak flooding on the Thames. In recent decades this has been the last week of January,⁶⁶ but if rainfall were higher, *ceteris paribus*, in the 12th century (cf. Meyer^{67, 68}), one would expect field capacity of the soils of the Thames catchment to be reached earlier and with it the date of peak flood. Thirdly, the lord of the parish, the king, had links with Beauvais. Such an association is not hard to find in the case of Henry I, in contrast to that of his brother, William Rufus. Beauvais lies on the eastern edge of Normandy, Henry's 'homeland', in which he spent more than half his reign. Although Henry had been granted the title of Count of Cotentin (the westernmost county of Normandy) in 1088 as part of the bargain struck with his older brother, Robert Curthose, to provide Robert with a major subsidy, and it was in the west, at Tinchebrai thirty-five miles east of Avranches, that Henry defeated Robert in 1106, the centre of power lay in the eastern part of the duchy, closer to the Seine and Rouen – Beauvais lies fifty miles east of Rouen. Finally, cloth making was a Wallingford industry, at least in late medieval times.

Lucian was the origin of a strong local cult, with an abbey dedicated to him in Beauvais in 579.⁶⁹ Henry hunted in the vicinity on several of his visits to Normandy. It is possible that Bishop Osmund of Salisbury who, Hollister argues,⁷⁰ had a major influence on Henry in his boyhood, may have been instrumental in resuscitating the memory of Lucian. The more plausible source of influence is Roger of Salisbury, Bishop of Salisbury and the King's justiciar. As effective ruler of England during Henry's absences in Normandy, he was the most influential voice in the kingdom. Roger must have been consulted on the restructuring of properties at the time of Henry's decisions to create a royal foundation at Reading and, *inter alia*, exchange Cholsey for lands at Budleigh for the Abbey of Mont St Michel as well as establishing the priory of St Frideswide in Oxford and gifting to it the three Wallingford churches in 1122.⁷¹

Although Field observes that the foundation of St Lucian's was early in Henry's reign, he offers no evidence for the assertion.⁷² Grants, which were never honoured, giving St Lucian's church to Monk Sherborne priory in the reign of Henry II and recording St Lucian's as 'an appurtenance' of the church at Padworth, Berkshire, provide no hint as to the foundation date of the church.⁷³ It is, however, clear that Henry I was deeply involved in events leading to new ecclesiastical foundations in and after 1120.

The creation of the parish of St Lucian can hardly have been close in time to the Norman Conquest. The growth of population outside the burh walls of Wallingford would have been small during the Conqueror's reign, and William II is unlikely to have been patron of a new

⁶⁵ Skermer *op. cit.* (note 46).

⁶⁶ A.C. Bayliss and R.C. Jones, *Peaks-Over-Threshold Flood Database: Summary Statistics and Seasonality* (Institute of Hydrology Report no. 121, 1993).

⁶⁷ Meyer, *East Kent Mills* (Quarterly Journal of the Meteorological Society, 53, 1927), 407.

⁶⁸ Meyer (*ibid.* 419) noted 'the fact that it was worth installing mills higher up chalk valleys indicates clearly that in 1087 the streams must have run for some months at least every year'. Although not all of such an effect can be held to be due to higher rainfall, the point is indicative.

⁶⁹ website *catholique-beauvais*, *op. cit.* (note 62).

⁷⁰ Hollister, *op. cit.* (note 47).

⁷¹ Dewey, *op. cit.* (note 35); Hollister *op. cit.* (note 47).

⁷² J.E. Field, *The Quarterly Journal of the Berks. Archaeological and Architectural Society* (1894).

⁷³ B.R. Kemp (ed.), *Salisbury 1078-1217* (English Episcopal Acta vol. 18, nos. 85, 86, 1999).

parish.⁷⁴ If, as seems much more probable, the dedication was Henry's, one is led to conclude that the parish was created in the period 1100–1120, when perhaps a hundred or more people lived in the area, and that Winterditch, its southern boundary, was dug at or before that time.

REASONS FOR DIGGING BRADFORD'S BROOK

Three possible reasons, singly or together, may account for the decision to dig Bradford's Brook: flood alleviation, water power, and navigation.

Flood alleviation

It is suggested that Bradford's Brook was dug so that water could be diverted from the town when floods occurred. Evidence on historic rainfall amounts is scarce compared with that on temperature, but Lamb provides estimates of rainfall which support the notion that heavier rainfall may have been the occasion of the cutting of Bradford's Brook. His index of winter months' rainfall rose from 98 in the period 1050 to 1100 to 102 in the next half century, 107 from 1150 to 1200, and 106 from 1200 to 1250.⁷⁵ The incorporation of a sluice at Hithercroft could in due course also have served to control subsequent millers' access to water for power, and could be opened at any time, such as when in the Civil War defence of the southern edge of the town (then expanded to Bradford's Brook, that is, south of the South Gate) required it. Assuming that the desire to cope with winter flows and hence the need for the Winterditch arose only after water had been captured from as far west as South Moreton, the whole Mill Brook as it now exists had been constructed by, at latest, 1121.

Water power

Bradford's Brook falls only 90 cm. between Hithercroft sluice and Brook Lodge (SU46061887) on the west side of Winterbrook, a distance of 1808 m. In the succeeding 233 m. it falls 177 cm.⁷⁶ The brook's course on its final fall to the Thames is like that of a mill tailrace as Terrace 1b of the Geological Survey falls relatively sharply to the Thames. The site now occupied by Brook Lodge is bounded on the south by the brook, which forms the parish boundary between Cholsey and Wallingford (St Leonard's), and to the north there is a straight ditch joining the brook immediately upstream of Bradford's Bridge.

The situation of a stream with a by-pass and a substantial fall is an obvious one for a mill. That the site is unusual in terms of its importance at one time is indicated by the description of the bounds of Wallingford Borough. The Wallingford Corporation statute book records the description of a perambulation:⁷⁷ 'On 21 Aug 1707 the mayor, aldermen, burgesses and several inhabitants walked around and set the bounds of the Corporation, and by the information of several persons agreed that they were as follows ... "and along the ditch [i.e. Chalmore Ditch – A.J.G.] up to Winterbrooke bridge [Bradford's Bridge – A.J.G.] and soe upp Bradford's brook to the oldway bridge [interlined – 'only leaving out the acre belonging to Cholsey'] ... " '.

⁷⁴ R. Morris, in *Churches in the Landscape* (1989), 178, notes that in Wallingford the population per church in the late 11th century and 12th century varied between 182 and 272.

⁷⁵ H.H. Lamb, *The Changing Climate: Selected Papers* (1966).

⁷⁶ Oxfordshire County Engineer, file C 812.02, box 6, January 1987 – June 1988, data from Technical Services Department South Oxfordshire District Council 4/1988.

⁷⁷ Wallingford Council Minute Book 1646–1706, f. 2213v., B.R.O. W/Ac1/1/2.

A similar record of the land now occupied by Brook Lodge appeared in the Wallingford 'Leidger Book'.⁷⁸ A perambulation of the bounds on 8 July 1806 records 'and so along the said ditch [Chalmore Ditch – A.J.G.] to Winterbrook Bridge; and so up Bradford's Brook (only leaving out a small piece of ground belonging to Mr Thomas Greenwood held of the manor of Cholsey) ...'.

It is difficult to ignore such specific references to a small outlier of Cholsey immediately above Bradford's Bridge. The Cholsey estate map of 1695 shows a triangular piece of land immediately west of the road in Winterbrook as being included in the estate, although the parish boundary lies to the south of the area.⁷⁹ It is clear that this is the piece referred to in the 18th century as belonging to Cholsey despite being north of the brook. The 1550 survey of Cholsey records under Winterbrook, 'Nicolas Pumfrett holdeth by copy dated the 19th day of May in the 26th year of the reign of King Henry VIII [1535 – A.J.G.] ... one little croft lying in the parish of St Leonard in Wallingford ...'.⁸⁰ This is the only entry which is extra-parochial to Cholsey and must refer to the Winterbrook triangle now occupied by Brook Lodge.

As Gunston (pers. comm.) notes 'Certainly the channel pattern on the site west of the road would indicate a former mill site ... The fact that the southerly branch turns north immediately alongside the road would indicate that the mill was on that branch (i.e. the longer, more devious channel). The straighter northerly branch would take the main stream, and cope better with floods. This presumes that the channel pattern does not arise from more recent flood-relief work, or a desire to provide a 'water feature'. The by-pass 'was re-dug in the 1960s or 1970s in order to prevent flooding upstream from Brook Lodge' (D.H. Bowen, pers. comm.). It had no doubt been re-dug many times in its history.

Early Norman water mills were small,⁸¹ so small, G. Astill calculated, as to produce no more power than a modern electric kettle (reported by Hinton⁸²). The relatively small size might imply a transient existence. The physical arrangement at Brook Lodge is so obviously one associated with a mill at this point that the absence of any records concerning it must mean that it had fallen out of use in medieval times. It is also possible that the competing miller at the town's South Gate, with royal approval, was influential in closing it down. The importance attached to the water supply to mills in early medieval times, and it may be said much later also, is emphasised by Murphy who draws on Bracton (d.1268) to note that a person could pray a writ from the king on the occasion of a party 'heightening a pond, or diverting a water course'.⁸³ It would be natural for the fosseur involved in digging the Winterditch to make provision for the mill, with the necessary two cuts at the time the ditch was dug.

⁷⁸ The Leidger Book 1766–1835: Corporation Minutes, f. 105 B.R.O. W/Ac/1/1/3.

⁷⁹ Dewey, op. cit. (note 35), Fig 3.10.

⁸⁰ Manorial survey of Cholsey (1550) P.R.O. Sc12/5/25 Transcribed by J. and J. Money.

⁸¹ M.T. Hodgen, 'Domesday Water-Mills', *Antiquity* 13, 261.

⁸² D. Hinton, *Archaeology, Economy and Society: England from the 5th Century to the 15th Century* (1990), 154.

⁸³ E.F. Murphy, 'English Water Law Doctrines Before 1400', *American Journal of Legal History* 1(2):103–118.

Navigation

Blair suggests that tributaries of the Thames may have been used for transport.⁸⁴ An early reference to cleaning Mill Brook⁸⁵ includes the name of Richard West, father of the barge-master Thomas West.⁸⁶ The latter is known to have used a portable winch to pull a barge up through a flash lock.⁸⁷ But too much significance should not be attached to this reference, since the Wests were farmers producing corn.⁸⁸ However, the Mill Brook was used to transport goods at one time, although whether this was the reason, or one reason, for the digging of the various ditches, including Bradford's Brook, remains uncertain. In the late 17th century, land was leased for mill-workers' cottages at Paper Mill Lane, South Moreton (M. Bennett, pers. comm.). The South Moreton estate map of 1818 shows that a paper mill was established on the east of the village.⁸⁹ The Berkshire V.C.H. relates that there was originally a paper mill, and subsequent to a fire two corn mills were built.⁹⁰ Another paper mill (A. Fox, pers. comm.), but probably a pulp mill, was sited at the point which, as noted earlier, was regarded in 1396 as the site of the 'west mill'. The arrangement at the South Moreton paper mill provided for a side channel into which barges were drawn to the south side of the mill. In its course it passed through a circular pond⁹¹ which allowed barges to be turned round. Hauling punt-like barges from Wallingford would have been easy, at least as far downstream as the west side of Wallingford, or conceivably via Bradford's Brook to the road at Winterbrook and to the Thames below.

The difference in levels between the Thames and both Mill Brook at the Southgate Mill and Bradford's Brook at Winterbrook are substantial, being of the order of 2 m., and the vertical interval would have been only slightly less in medieval times. Navigation along the stretch of the Mill Brook beyond the Southgate Mill in Wallingford would have been impracticable owing to the apparent lack of a by-pass to the mill. At Winterbrook the mill arrangement suggested above lent itself to navigation past the mill site if a means of leading barges up and down the mill race were possible.

Discussion of reasons for the digging of Bradford's Brook

Flood control appears to present-day observers as a plausible rationale, and the fact that in the 16th century complaints were made about raising the level of the stream through installation of an overshot mill at the Southgate site does nothing to reduce the force of this justification. The sluice would have been an important safeguard for the miller in his concern to maintain the level. Water power was of considerable economic value and this use

⁸⁴ J. Blair, 'Later Anglo-Saxon Oxfordshire, 700-1100', *Oxoniensia*, lxxv (2000).

⁸⁵ 'in defaulte for clensyng of Badffeurds Broke Mr Payne 4d Richard West 2d John Pryden 4d John Wriggillysworth 1d'. Payne was the name of the miller at the Southgate Mill, Wallingford, Richard West was the father of Thomas (see note 86). Wallingford Court Rolls (c. 1560), B.R.O. W/JBC 27.

⁸⁶ M. Prior, 'The Accounts of Thomas West of Wallingford, a Sixteenth-Century Trader on the Thames', *Oxoniensia*, xlvi (1981), 72-93.

⁸⁷ R.B. Peberdy, 'Navigation on the River Thames between Oxford and London in the Late Middle Ages', *Oxoniensia*, lxi (1996), 61.

⁸⁸ Bill of complaint (P.R.O. E112/2 No.9, undated) by Nicholas Payne, farmer of the queen's corn mills at Wallingford, refers to, *inter alios*, Thomas West as one who ground his corn at the competing mill of one Raffe Pollington.

⁸⁹ Enclosure map B.R.O. Q/RDc 40B.

⁹⁰ *V.C.H. Berks.* vol. iii, 500.

⁹¹ The existence of this former pool was revealed some decades ago when a tractor was almost lost in the silty soil which now fills the site.

via a mill at Winterbrook presents an argument which might be associated with navigation as a *raison d'être* for the brook. It is possible that navigation became a use of Bradford's Brook if the final stretch close to the Thames was operable.

IMPLICATIONS OF THE CREATION OF BRADFORD'S BROOK

So long as water, whether for power, transport, brewing or domestic needs, was valued in the town, it seems likely that at low flows of the Mill Brook the overflow channel represented by Bradford's Brook ran only as a trickle.⁹² With winter rain or at any other time of flood, its use was clear. The Victorian architect who designed 1 Winterbrook, which lies beside the brook, may well have thought the risk of occasional flooding by Bradford's Brook of the cellar living quarters so low as not to call for a higher base for his works.⁹³ The decision by Mr Boughton in 1932 to stop using water as a means of powering his mill, a steam engine having been installed in the mill in 1864, meant that the sluice to Bradford's Brook could be left open.⁹⁴ Debney (pers. comm.) points out that the permanent diversion of the Mill Brook flow to Bradford's Brook can only have raised water levels in the terrace gravels of Winterbrook. When first dug the brook would perhaps have experienced ephemeral high flows of short duration, as in the 1894 flood which is recorded as filling the road in the upper part of Winterbrook.⁹⁵ More recently, with the gravels more frequently fully charged as a result of the stopping-up of the Mill Brook in 1972, Bradford's Brook provides an abundance of water which appears as occasional winter floods in the cellars of 1 Winterbrook. With the higher winter rainfall predicted as a result of climate change, this event is likely to become more common.⁹⁶

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⁹² Indenture of 12 October 1810 between Lord Kensington and Thomas Greenwood, Robert Dalzell and Charles Greenwood relating to Brook Lodge, Reading Road, Wallingford. This document refers to the land now occupied by Brook Lodge as being formerly an osier bed, perhaps the mill pond of the putative mill.

⁹³ Law (pers. comm.) notes that the house was built close to the time of 'the middling series of floods in 1852'.

⁹⁴ J. and S. Dewey, *The Book of Wallingford* (1989).

⁹⁵ D. Beasley, *Around Wallingford in Old Photographs* (1994), 77.

⁹⁶ United Kingdom Climate Change Impacts Review Group, *Second Report: Review of the Potential Effects of Climate Change in the United Kingdom* (1996), Fig. 2.5.