

Was there a watermill at St Ives?

by Bridget Flanagan and Keith Grimwade

The Domesday Survey of 1086ⁱ for Huntingdonshire records one or more watermills in 12 of the 15 settlements along the Great Ouse from Eynesbury to Hemingford Grey. But, continuing eastwards, there are no mills recorded in the downstream settlements of St Ives, Holywell and Bluntisham. Given the size of St Ives' recorded agricultural capacity - in the top 8% of the county – it seems surprising that this parish was not self-sufficient in milling its own grain. (Windmills would not be introduced into England until the mid-late 12th century, and so the only other methods of milling grain in the 11th century were either by hand querns – a laborious and low-scale operation – or by animal-powered mills.) However, the lack of watermills in St Ives and eastwards in 1086 is primarily explained by the physical geography of the river. At this point where the Great Ouse enters the area of The Fens, the river was wider and shallower than upstream, the gradient lessening and a tidal influence felt. All these factors would significantly reduce the efficiency of a watermill.

About a hundred years earlier than Domesday in 986 – or it could have been 974 because the records are confusingⁱⁱ – the estate of Slepe (later to become St Ives) was given to Ramsey Abbey. In 1041 Ramsey Abbey received the neighbouring estate of Hemingford Grey. Domesday records two watermills here, and they were the most valuable in Huntingdonshire. Yet Hemingford Grey's arable land and plough teams were of only average size in the county and could not have kept these mills busy. So, it is logical to deduce that these mills must have been servicing grain from other estates - one obvious source being the grain-rich neighbour, St Ives. However, the economics of the Hemingford Grey mills were also determined by political events. Between the Conquest of 1066 and Domesday of 1086, the manor of Hemingford Grey had been taken from Ramsey Abbey by Aubrey de Vereⁱⁱⁱ, one of King William's knights. Ramsey Abbey disputed the legality of this and maintained ownership (albeit unsuccessfully) for some time hence. But, had a working relationship for milling at Hemingford Grey already been established between the two manors? Yes - almost certainly when under the joint ownership of Ramsey Abbey. And, due to the physical challenges of building a watermill at St Ives, the relationship may well have begun earlier when the two estates were under different

ownership. It is noted that the mills are sited almost directly on the joint parish boundary.

Medieval lords of the manor – especially powerful owners such as the ecclesiastical bodies - made sure to maximise their estate profits by compelling their tenants to use the estate mill. This was called ‘suit of mill’ and was rigorously enforced. So, although it is possible that a commercial arrangement between Hemingford Grey mill and Ramsey Abbey’s Slepe estate could have been formed after de Vere’s take-over, it is much more likely that Ramsey Abbey wanted St Ives’ grain to be milled in its own mills. Hence its grain would have been transported by boat or cart to the Abbey’s mills at Houghton and Wyton.

Was a watermill built at St Ives in the years following Domesday? We examine the documentary, map and landscape evidence to try to find out.

In the early 12th century Ramsey Abbey sub-divided its Slepe estate^{iv} to endow the new Priory, dedicated to St Ivo, with land and tenants. In addition to his new estate, the Prior would also receive the corn tithes^v from the existing estate. The first records we find of any mills on either estate at St Ives are retrospective, and probably refer to the early 13th century. And so, from 1086 until then, we must surmise that all St Ives grain was being milled elsewhere – most probably at Houghton and Wyton.

A Charter of Abbot Ranulph of Ramsey Abbey, who was elected in 1231 and died in 1253, records the granting of a windmill to the Prior of St Ives: *the windmill outside the village of St Ives, which mill William of Timeworthe sold to us, along with its site and produce.*^{vi} Clearly this windmill was operational and a going concern at the time of its gift from Ramsey Abbey to the Prior, and so could date from before 1231.

The next reference to a mill is in 1252 when an inquisition into the returns from Ramsey Abbey’s lands in Holywell^{vii} concludes that: *Each and every person must also remember that they ought de jure to do suit of mill at Houghton, which they have not done after the construction of the Prior’s mills at St Ives.* First of all we note the plural of ‘mills’. The Prior must have acquired or perhaps built another grain mill, or

mills, in addition to his windmill gifted in the Charter – and whether wind or water-powered, we don't know. The commercial politics between the estates of the mother house Ramsey Abbey and its daughter house the Priory are revealing. We ascertain from the Liber Gersumarum (book of works) of Ramsey Abbey that the Abbey did not have a mill at St Ives – there are no records. And from the edict issued at Holywell we can presume that the Abbey kept all its milling 'in-house' on its own estates and did not share or avail of the milling facilities of the Priory estate. Furthermore we see that the Abbey is determined not to lose any milling business from its Holywell tenants who appear to have been recently 'poached' by the Priory for its new mills. The Holywell grain is thus ordered to by-pass St Ives and be taken to Houghton as before.

One more brief reference explains that shortly before 1440 the Prior exchanged land in Bury for a building at St Ives *near the Priory and the Prior's mill.*^{viii} There is no information as to what type of mill this is, and we cannot be sure of the location because the exact site of the Priory is not known. (The Priory building was demolished in the mid 16th century.) However, it is believed to have been in the vicinity of the Priory Barn (parts of the walls of which remain) where grain would have been stored. This is close to the river.)

After the Dissolution of the Monasteries in 1539 the Slepe and the Priory estates were taken by the Crown and then passed to new owners who kept them largely intact. We learn from the 'List of the lands of dissolved religious houses'^{ix} that there were '*two mills within the site of the priory of St Ives*'. Again, we are not told what types of mill these were, and no further records relating to mills on the Priory estate have surfaced.

However, there are clues on the first detailed maps of St Ives, drawn by Edmund Pettis in 1728 and 1732, and in the present-day landscape. On his 1728 map Pettis labels a field at the junction of the present-day Needingworth Road and St Audrey Lane 'Mill Hill'. On the 1732 map he draws a small circle with a dot in the middle in the north-east corner of this field (Fig. 1). We can be confident that he is using this symbol to show a windmill, although we cannot tell if it is a working windmill, or a disused one. An identical symbol is used on the 1728 map on common land on

Somersham Heath allocated to St Ives a little to the south of where Burleigh Hill Farm and the St Ives Rugby Club are today (Fig. 2). So, there must have been a windmill – working or disused – here as well. Either of these two locations could be the site of the windmill recorded in the documentary evidence, above, as they fit with the description that it was ‘extra villam Sancti Ivonis’ - i.e. beyond the houses/residences of St Ives.

Fig. 1 ‘Mill Hill’ windmill on Pettis’ Map of St Ives, 1732

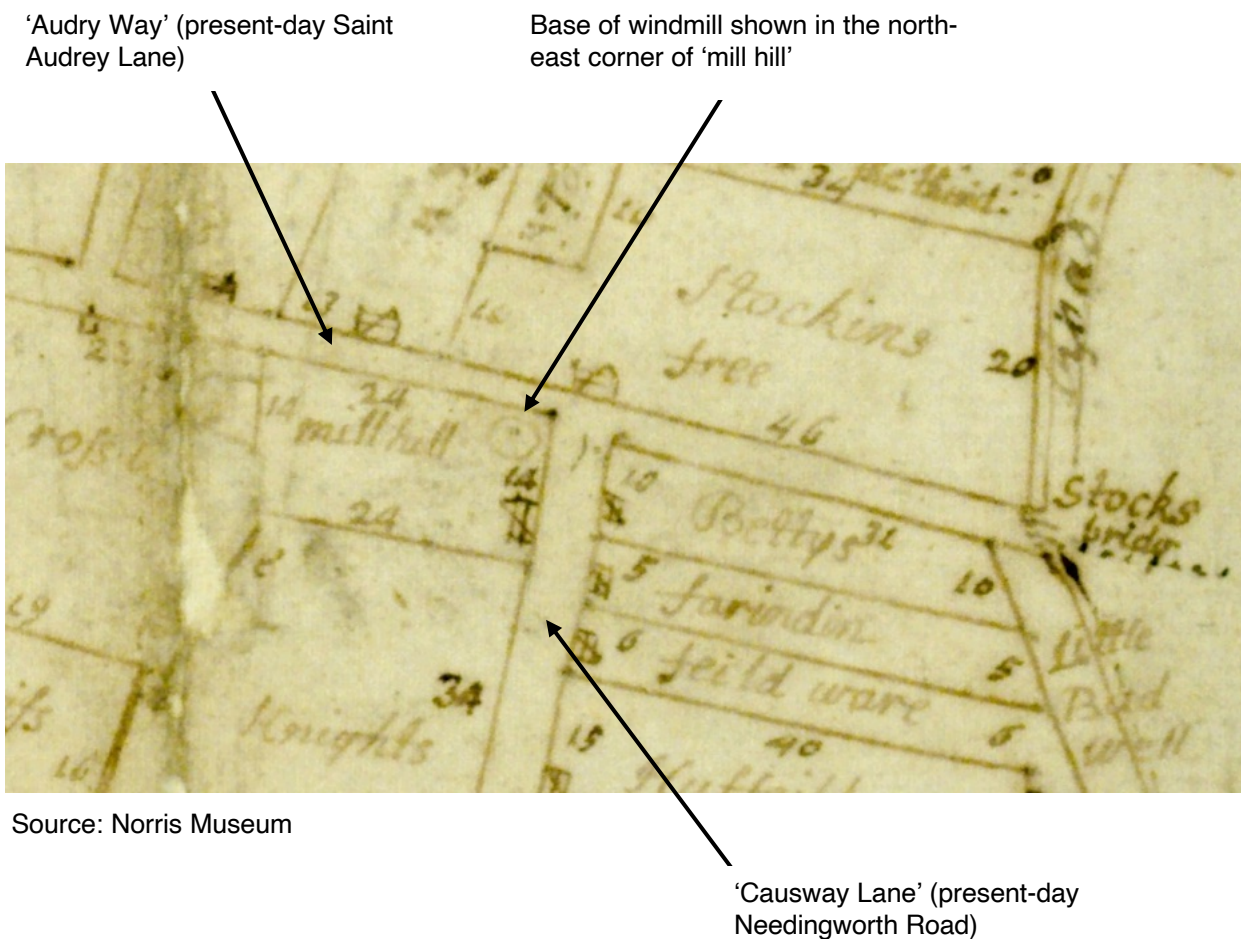
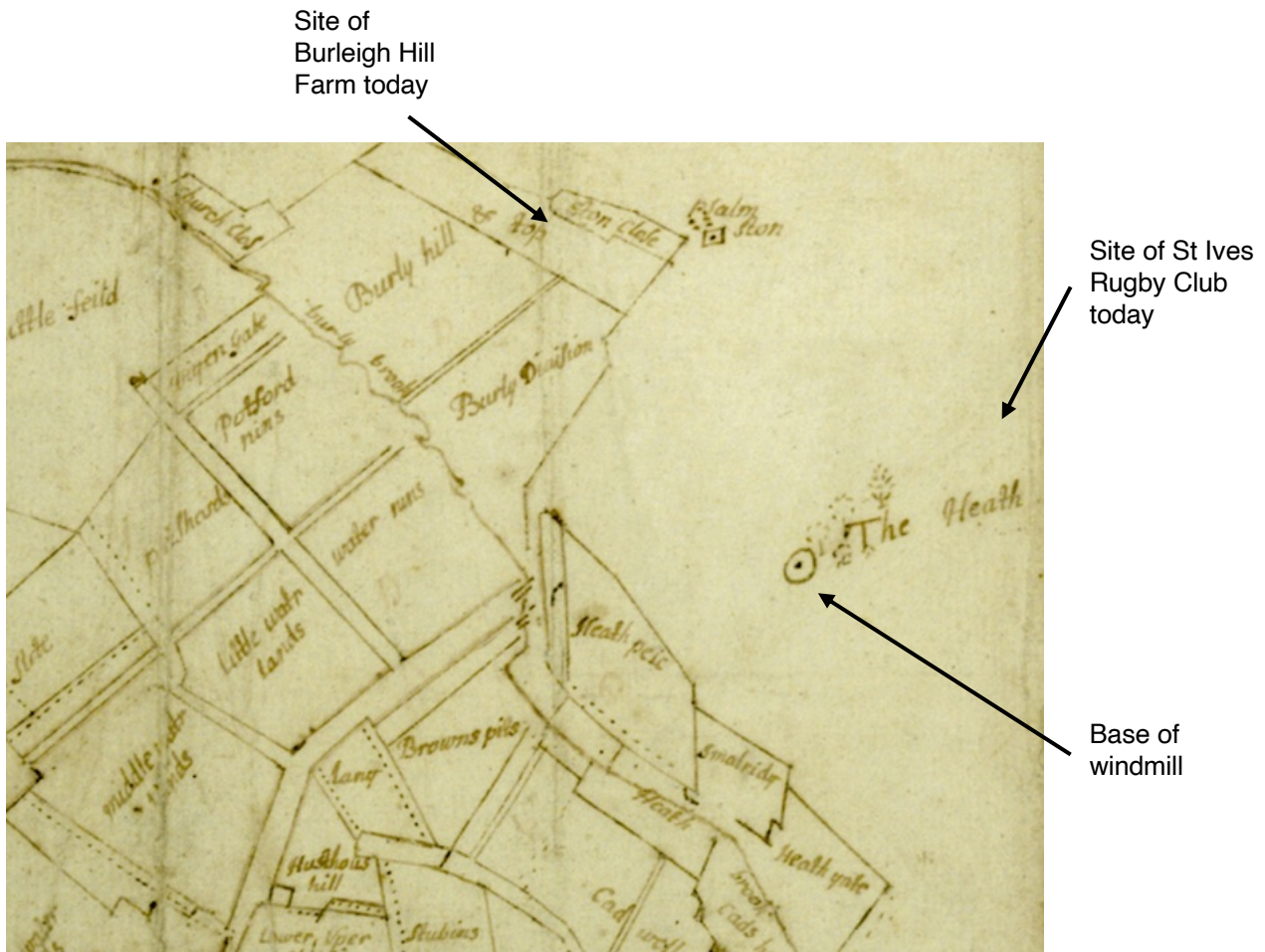


Fig. 2 'Burleigh Hill' windmill on Pettis' Map of St Ives, 1728



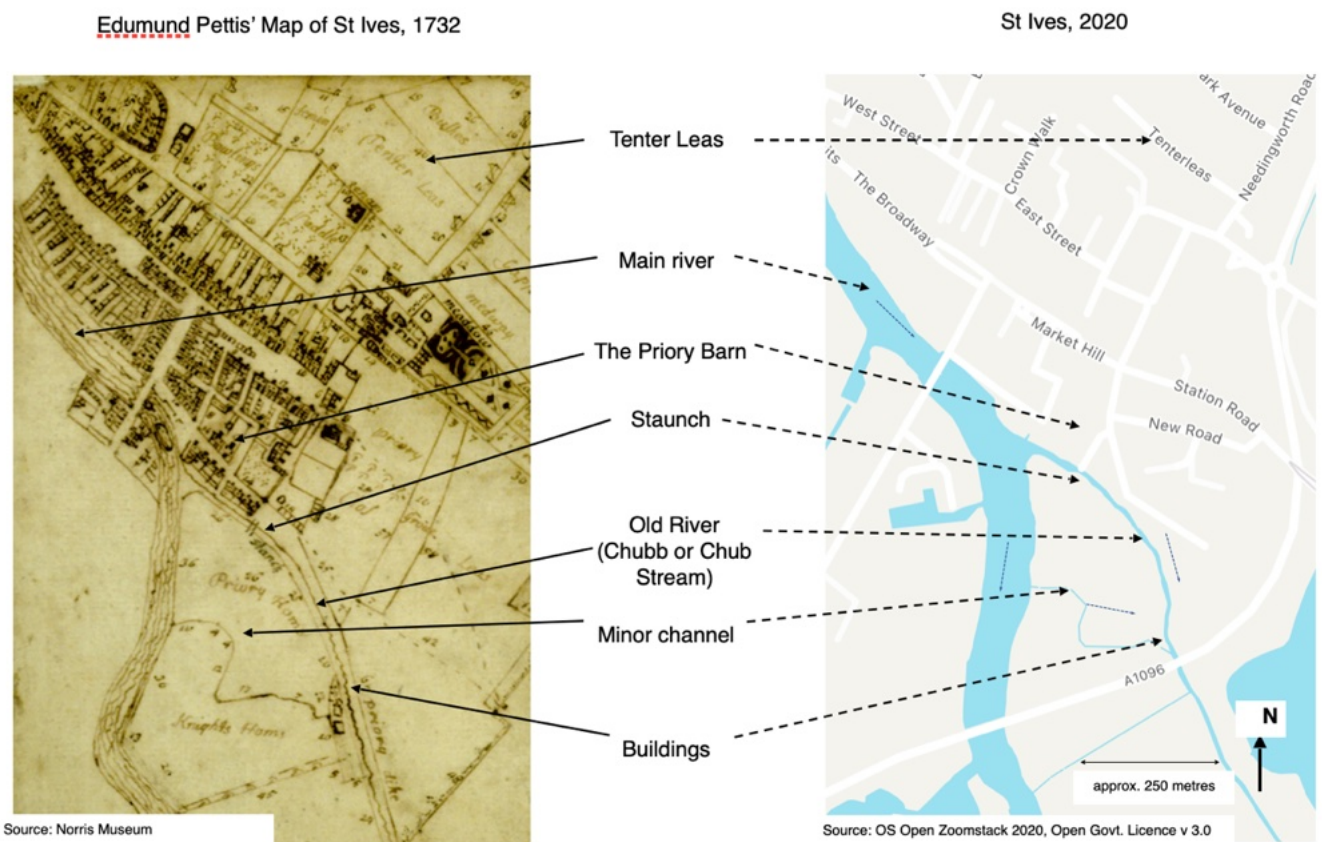
Source: Norris Museum

On both maps Pettis shows the stream known today as the 'Old River' or the 'Chubb or Chub Stream' but he calls this 'Priory Dike'¹ (Fig. 3). The shape and form of the Old River fit exactly with the sort of channel associated with medieval watermills, which led Burn-Murdoch to conclude that '*it was probably dug to provide water to power the Priory's watermill*'.^x Because it was difficult to control the flow of the main

¹ The name is very misleading. It almost certainly does not mark the old course of the river. Indeed, it is highly likely that the main river has been constant since the Roman period and earlier because river channels on this type of alluvial flood plain rarely change their course. It is uncertain when it was first called the 'Old River'. Pettis called it 'Priory Dike' in 1728. It was first labelled 'Old River' on the OS map of 1886. However, there is a reference to an 'Old Ree' (river) in the List of Lands in Dissolved Houses written in the early 1540s being between Holywell and Hemingford Grey, but it does not say where. The authors do not know when it was first called the 'Chubb or Chub Stream'.

river, side channels such as the Old River were cut, and the mills sited on them. The cut probably took advantage of relict channels on the meadow, and this would explain its non-linear form. It is possible that it was originally dug to give the Priory easy access to the main river and/or to act as a drainage channel, and that it was subsequently adapted for water milling. Another minor channel from the main river flows into the 'Old River'. Pettis drew it with a markedly sinuous form - and it looks the same today. There are examples of short sinuous streams like this one at Hartford and Brampton, and both are known to have been associated with channel engineering for a watermill. This is further evidence that a watermill could have been located on the Old River. On Pettis' 1732 map there are two buildings close to where the minor channel joins the Old River. These are not shown on the 1728 map, but that does not mean that they were not there, and it is possible that they were associated with milling activity.

Figure 3 Pettis' 1732 map compared with the present-day



Also, Pettis labelled a field a few hundred yards north of the former Priory 'Tenter Leas'. 'Leas' means a grass field or meadow. But a 'tenter' is a very specific term which describes the wooden frame for drying and stretching woollen cloth as part of the finishing process of manufacture. After the cloth has been fulling or felted by being beaten with wooden hammers, it shrinks and distorts so it is laid out to dry, held tight by the hooks on the tenter frame and re-aligned. A 'tenter leas' describes a whole field equipped with these stretching racks, and thus a commercial operation. This strongly suggests that there was a fulling mill relatively nearby to produce the cloth – and in medieval times this would have been a watermill. It is of note that there were fulling mills at Brampton and Houghton in the 13th and 15th centuries, so the industry was established in the area. However, we can only conjecture as to whether the Priory built a watermill as a fulling mill or converted an earlier grain mill.

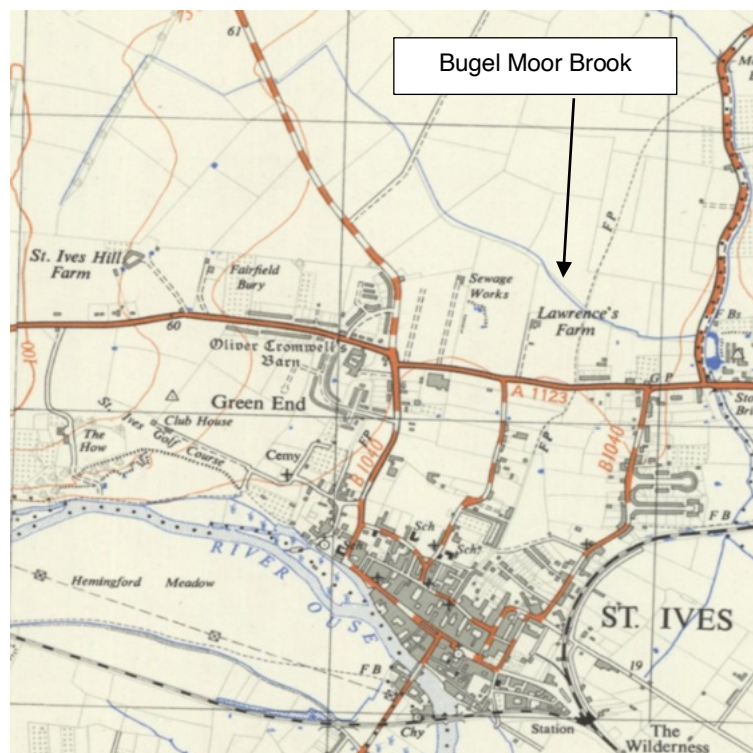
There is one further occurrence of the word 'mill' on the Pettis maps. One of St Ives' three large open fields is called '*Mill alis King's brook feild*', i.e. Mill or King's brook field. At the southern end of this field, on land opposite the junction of what is now Pig Lane and Saint Audrey Lane, is a parcel of land labelled '*mill fours*' near '*Bugel moor brook*' (Fig 4). Was this the site of a windmill, or could there have been a watermill on Bugel Moor Brook? At first glance it is hard to imagine that a watermill could have been built on such a small water course, but the 1949 OS map shows its full extent prior to the post-1945 development in St Ives (Fig 5)². At certain times of the year, and especially if it was fed by field drains, it might have been able to power a watermill. However, this can be no more than speculation.

² Bugel Moor Brook can still be followed above ground for most of its course from Somersham Road to the southern corner of Wheatfields Primary School.

Fig. 4 'mill fours' and Bugel moor brook on Pettis' 1728 Map



Fig. 5 1949 OS Map showing the course of Bugel Moor Brook



Many years after the time when there might have been a watermill on the Old River, Pettis records that a staunch³ was built in July 1730 on the Priory Dike - '*in which dike there was never any before*'. This was almost certainly done to manage water levels affected by the rebuilding of the St Ives staunch on the main river in 1723. The Priory Dike would have acted as a safety valve, preventing the town and the surrounding meadows from flooding if the St Ives staunch raised the river level too high. Pettis shows this staunch on his 1732 map, at the site of the present-day weir on the Old River (Fig. 6).

Fig. 6 The weir on the Old River



³ A staunch at this time on the River Great Ouse normally means a flashlock, a removable arrangement of timber boards that can (when in place) dam the river. It raised water levels and allowed river traffic to negotiate shallows. It is unlikely that the Old River was used for transport in any significant way, so Pettis was probably using this term to describe a sluice (a wooden barrier with an adjustable gate), or possibly a weir (a wooden or rock barrier built across a river to restrain its flow).

To summarise, we know that although there was no watermill in St Ives in 1086, documentary evidence tells us there were at least two (grain) mills between the 13th to 15th centuries, at least one of which was a windmill. Pettis' maps provide place-name evidence for a watermill that was involved in cloth production. The landscape evidence strongly suggests a watermill on the Old River. The most likely site is between the present-day weir and the minor channel. The group of buildings identified on Pettis' map near to the confluence of the Old River and the minor channel might have been associated with milling, but without a successful archaeological excavation here – or new documentary and/or cartographic evidence being discovered – we have no conclusive proof. Although unlikely, there might even have been a watermill north of Saint Audrey Lane on Bugel Moor Brook. Did St Ives have a watermill? Probably.

ⁱ Palmer, J. & Slater, G., 2010. *Domesday Book Online* (opendomesday.org).

ⁱⁱ <https://www.british-history.ac.uk/vch/hunts/vol2/pp210-223#fnn4>

ⁱⁱⁱ <https://www.british-history.ac.uk/vch/hunts/vol2/pp309-314>

^{iv} <https://www.british-history.ac.uk/vch/hunts/vol2/pp210-223#fnn208>

^v Norris, Herbert E, 1889, *History of St Ives* (St Ives) p13

^{vi} Hart, W. H. & Lyons, P. A., eds., 1884-93. *Cartularium Monasterii de Rameseia Vol. II*, p. 225-6 (London).

^{vii} Hart, W. H. & Lyons, P. A., eds., 1884-93. *Cartularium Monasterii de Rameseia Vol. I*, p. 302 (London).

^{viii} <https://www.british-history.ac.uk/vch/hunts/vol2/pp210-223#fnn56>
Accessed 29th November 2023.

^{ix} Public Record Office. List of the Lands of Dissolved Religious Houses (Lists and Indexes Supplementary Series vols. 1 to 7, Kraus Reprint 1967). No. III vol I Bedfordshire - Huntingdonshire, p242

^x Burn-Murdoch, B., 2009, p. 37. *The Shaping of St Ives* (Cambridge).