Post medieval and Industrial – AD 1485-1899

The AONB includes a number of important post-medieval and industrial features that include mills, brickworks, salterns, historic gardens and field systems (Fig 20).

There are a number of historic maps that show the AONB. Care must be taken when using historic maps, since their accuracy was often dependent on the purpose for which they were intended. This means that some details may have been omitted, or details may have been copied incorrectly from other earlier maps.

The Saxton map of 1575 (Fig 21) is one of the earliest maps of the AONB, and even though the Harbour is not shown in detail there are some interesting features. Hayling and Thorney Islands are both shown as detached from the 'mainland', and channels are shown extending to Chichester and well beyond Fishbourne. There is a map by Speed of 1611 (Fig 22), in which Chidham and Bosham are somewhat distorted, but one interesting feature is that two islands (or sandbanks?) are shown to the north of Thorney. A further island to the west of Thorney might be Fowley Island. The two islands or sandbanks to the north of Thorney are not shown on the Norden map of Hampshire of 1609 (Fig 23).

In the large Morden map of Hampshire of 1695 (Fig 24), the harbour is shown squashed into the edge of the map, and Chichester itself seems to be represented above Chidham. In another Morden map of 1695 (Fig 25) Chichester is in a more accurate location, although this map appears to have been copied from the earlier 1611 Speed map.

Other maps of the 18th century include the Kitchen map of 1750 (Fig 26), the Bowen map of Chichester of 1756 (Fig 27), all of which show the Harbour, again without much detail. More detailed are the Yeakell and Gardner maps dating to the 1780s (Fig 28) which set the standard for accuracy and showed individual buildings and field boundaries. A number of sites have been identified from this map (see below).

The Capper map of 1808 is less detailed (Fig 29), the Paterson and Fareham map of 1811 (Fig 30) and the Chichester map by Dugdale of 1840 (Fig 31) more so. The Tithe maps and Apportionments that date to the early 19th century also identify fields with names that may relate to the industrial and agricultural processes carried out in the locality (see below).

Watermills

Watermills were used extensively in the post-medieval period for grinding corn as well as in numerous other industries such as iron, gunpowder, fulling and paper. Often they stood idle for lack of water in a region where many of the local streams depended on lavants to provide a full flow. Little excavation has taken place on Sussex watermills, with the exception of those used in the iron industry. Whether the evidence from watermills in the iron industry is relevant to other industries remains to be tested by excavation. There has been no work on 16th century corn mills. Historical sources suggest that watermills are likely to be complex sites, often undertaking more than one operation either simultaneously or chronologically.

At Marsh Farm, a water mill (Chi SMR 204; 477500 104980) is shown on the Yeakell and Gardner map. The large mill pond to Quay Mill (Hants SMR 23,431.00; 474857 105430) lies just to the east of modern Emsworth (Fig 33). The entry gates of the large 10.3 acre millpond has been solidly concreted and the water flow is now controlled by an L-shaped

concrete pipe with an intake northwest of the building and an outfall through the original arch on the harbour side. A watermill is also known at Bosham (Chi SMR 2391; 480390 103800).

A number of mills are known or suspected in Fishbourne. A watermill (Chi 2375; 483776 104483) was rented in 1790 and by the mid 19th century was a breast shot mill which worked only when sluice gates were open at the Salt Mill. However, due to lack of co-operation between the millers a post windmill was imported from Rustington (see above). There may have been another post-medieval watermill (Chi SMR 2378; 483000 104000) in this area.

Tidemills

There is a scatter of tide mills across the AONB, for example at Emsworth. There may have been seven or eight in operation around the harbour by the mid 19th century (Reger 1996). Tide mills harness the sea in a mill pond and a sluice gate is used to release the energy of the water. They were expensive to build, but the power was constant and reliable even though they could operate only for eight to ten hours in every tidal day. Tide mills are rare in Sussex and have received little archaeological attention.

A number of tide mills are clustered around the head of Emsworth Channel. A tidal water mill (Chi SMR 100; 475339 105415) at Hermitage was built towards the end of the 1880s, but burned down only a few years later (Reger 1967). Old Slipper Mill (Fig 32), also known as Stags or Stakes Mill (Chi SMR 115; 475377 105448) is said to date from the mid 18th century (Reger 1967), although what survives today is the store built in *c* 1910. The mill, or miller's house, was destroyed by flood.

The tidemill at Birdham (Chi SMR 2382; 482840 101120) had two water wheels and was built in 1768, although an earlier mill is mentioned in Domesday Book. Originally there were two mills side by side.

Hayling Island Tide Mill (Hants SMR 33,028.00; 472600 101200) lies on the southern arm of an inlet on the east coast of Hayling Island that flows into Mill Rithe. It is recorded as a "corn mill" on the 1st Edition OS map. A brick building which could be part of the original tide mill stands on the quay and at low water it is possible to see a considerable part of the embankment which once dammed the tide pond.

Windmills

Windmills were once a common sight across Sussex, today only some 88 still stand in the county (Austin *et al* 1985). Most date from the 19th century, a few from the 18th. Windmills had a number of disadvantages: they needed a steady breeze to operate, too much and there was the danger of either the sweeps 'running away', causing the mill to catch fire, or the structure itself could blow over.

Windmills have received little attention from archaeologists in the past; it is important that all standing mills be surveyed. The locations of 16th or 17th century windmills can often be discovered from historical sources. The only archaeological excavation work carried out purposely on windmills were the excavation of the 19th century post mill at Friston and that of the 18th century mill at Pashley Down, Eastbourne. The medieval tradition was to set cross trees – often in a mound – to form the foundations for the windmill; there is an

example of this on Hayling Island. The post-medieval tradition was to set windmills on the surface – often on brick piers. There is an example of this at Fishbourne (see below). A major problem with the archaeological excavation of early post-medieval windmills is their location on the ground. The approximate vicinity of such a mill may be relatively easy to locate from historical sources, but their exact location more elusive (Brunnarius 1979).

A windmill (Chi SMR 207; 477630 104900) is thought to have stood near Marsh Farm, although it does not feature on the 1724 Budgen map, and there is also a windmill at Nutbourne (Chi SMR 125; 477000 105000). 'Bosham Windmill (corn)' (Chi SMR 2380; 480347 104512) is shown on the OS 1st edition (1875), but is not featured on the 2nd edition OS map of 1898. A windmill at Dell Quay (Chi SMR 2385; 483550 102920) was a large square built post mill that was claimed could grind 7 loads per week with two pairs of stones.

A post windmill was imported from Rustington after a dispute between millers running a watermill (see above). This post mill survives as foundations of brick piers in the garden of the mill house (Chi SMR 2373; 483755 104440). This windmill was moved from Rustington in October 1857; it was pulled down in the summer of 1898. It was described as a black open trestle mill, with two pairs of stones and a tailpole (Blakeney 1974). A second windmill (Chi SMR 2376; 483810 104070) was built in 1796 at the end of the wharf. It was a corn mill, known locally as Farhill's Mill. It was later replaced by a galleried smock mill (likely Chi SMR 2377; 483810 104070) that burnt down in 1866.

Malthouses

Malting could be a cottage industry as an adjunct to farming or carried out on a more commercial basis using imported corn that had better properties for producing different types of malt. Brewing was also often a cottage industry carried out in public houses known as beer houses, although there were also larger breweries, for example in Chichester, that supplied or owned a number of public houses. There is evidence of connections between corn milled in the AONB, malting, and brewing in Chichester. In his 1792 will, mealman John Pannell left property that consisted of a tide or water corn mill, buildings and lands in New Fishbourne and Bosham to his son who later became a brewer in the city (Saunders 2001).

In the AONB, the 1st edition 6" OS map features a malthouse (Chi SMR 3504; 475252 105462) and a second is shown on the neck of land at the Slipper on an 1898 map (Chi SMR 139; 475268 105606). On the 1846 Tithe map for West Wittering, field number 44 centred on 478736 099430 is referred to as 'Malthouse field' on the Apportionment. This is near 'Malthouses' marked on the modern OS mapping. The Apportionment also referred to field 117 nearby, centred on 478553 099317, as 'Malthouse four.'

At the north end of Chidham Lane, field 120 on the 1846 Tithe map is referred to as 'Malthouse cottage and garden' on the Apportionment. The field is centred on 479225 105322. This is adjacent to field 117 centred on 479150 105204 that is referred to as 'Malthouse field.' The modern 'Malthouse Nurseries' is located in the next field west.

Brick and tile making

Another industry – known in the AONB from the Roman period – was brick and tile making. This was a major industry in Sussex, although detailed fieldwork is still in its

infancy. Sussex bricks were valued for their warm red colour. The production of bricks in clamp kilns was common in the16th and 17th centuries, more permanent kilns became more numerous from the 18th century onwards. Tiles were frequently produced at the same sites as bricks. The opportunity should be taken to record brick and tile kilns while they survive; surveys should also not neglect the remains of other structures, such as pug-mills and drying sheds that may lie nearby.

There are references to brick making along the southwest coast of Chidham. An estate survey of 1785 (Add. MS 2158) refers to 'Brick Kiln Marsh' on Chidham Farm (Chi SMR 143; 478200 102700). This is the long field 259 on the 1846 Chidham Tithe map, also described as 'Brick Kiln Marsh' on the Apportionment. Adjacent to this, a square field 254 centred on 478418 102620, is referred to as 'Brick kiln twenty' on the Apportionment.

A brickworks (Chi SMR 142; 475480 105450) exploited the local red clay at the Round House that stands on the site of the puddling mill turned by horses. 'Brick Field' is marked on the 1st edition OS at 474700 105340 at the southwest corner of Emsworth, partially included within the AONB. A brickfield (Chi SMR 247; 478600 105200) stood on the west side of Cot Lane at Maybush on the Chidham boundary and was in operation by 1932, but closed in 1964. It made hand made, clamp fired bricks. On Hayling Island, an 'Old Clay Pit' is marked at *c* 472070 103790 on the 1st edition OS.

Brickworks also thrived in the Bosham area. A brickfield south of Colner Farm (Chi SMR 1290; 480100 105300) is shown on the 1896/1910 6" OS map. It was in existence by 1896, but closed *c* 1918. A brickworks and pottery (Chi SMR 2392; 481950 104910) is known at the junction of the Portsmouth road and Chequer Lane. This was in existence by 1867, but also closed during WWI. At Bosham Hoe, a brick kiln and tile house (Chi SMR 2394; 480700 101620) are mentioned in a lease of 1759, and marked on maps 1813-79 and as 'Old Brick Kiln' in 1898. They also feature on the 1839 Tithe map and Apportionment.

A brick kiln (Chi SMR 30; 477370 099170) on the foreshore at West Wittering probably dates to the 18th century. North of Gutner Common, field 652 on the 1845 North Hayling Tithe map is recorded as 'Kiln piece' on the Apportionment. The field is centred on 473519 102251. Brick works also existed further south, shown on the 1844 South Hayling Tithe map. Field 231 is recorded on the Apportionment as 'Kiln Yard &c' and is centred on 473289 099530. This is likely to refer to a brick kiln; across My Lord's Pond, but outside the AONB area, other brickyards are recorded.

Salt production

By the 17th century, south coast salt production was by the boiling of seawater, concentrated by sun and wind, in lead or iron pans over coal fires (Greenwood 2000). There is historical evidence suggestive of salt making – in 1717 James Ayles took a lease of a house for boiling salt on Hayling Island and also leased part of New Wall marsh in Apuldram and erected a saltworks on this (Greenwood 2000). This saltworks was unoccupied by the 1840s. South coast saltmaking seems to have declined in the 19th century due to increased competition from Cheshire and salt imported from the Continent. The storm of 1842 also did much damage to the industry (Greenwood 2000).

The southwest corner of Appledram parish on the tidal channel seems to have been the site of flourishing salt works since at least the 18th century; 'salterns' are marked here on Yeakell and Gardner's map of 1783. 'Salterns Copse', 'Salterns Lock' and a house 'Salterns' (Chi SMR 2368; 483000 101100) are also evident on OS maps and suggest salt

making in the Apuldram/Birdham area continued into the 19th century. 'Salterns Copse' and 'The Salterns' also feature on the 1847 Tithe map, marked as 65 and as field 77 respectively. Nearby, field 66 centred on 483239 101332 and since lost to the modern marina, is referred to as 'Saltern's Field' on the Apportionment. The track running from midway between Croucher's Farm and Pump Bottom Farm (ie from 484438 101753) southwest towards the marina is referred to as 'Saltern's Lane' on the Apportionment. The 'swimming pool' of Dell Quay House also marks the site of an old salt panning pond (Chi SMR 2443; 483560 102970) that became disused by the 1840s.

There are two areas of salterns known in North Hayling. 'The Great Salterns' (Hants SMR 23,627.00; 473100 104100) and 'The Little Salterns' (Hants SMR 23,628.00; 473500 104000) both consisted of pans for evaporating water and went out of use in the late 19th century.

An area of ditches at Gutner Point (Hants SMR 54,707.00; 473546 101540) were dug to drain the salt marsh and increase the grass growth, possibly in the 17th or 18th century. A central north-south running ditch, with other east-west ditches radiating out from it at Gutner Point can be seen on aerial photographs taken in 2000 (Aerial photo (c); NMR 18705/28), although they are not shown on the 1st edition OS mapping.

Three salterns are known in Southern Hayling. Menghams dated from the medieval period and was discussed above. The two other salterns – Yenmans and Eastoke saltern were post medieval (Hants 23,333.00, 23,334.00; 473900 098900, 474700 098900 respectively). All the salterns went out of use in the 1870s and nothing is visible of them today.

The copperas industry

Copperas or green vitriol was used extensively in the textile and metallurgical industries and for a number of other purposes. Copperas is a form of ferrous sulphate, extracted from iron pyrite-rich nodules, which was a key ingredient in the production of nitric and sulphuric acid from which chlorine was produced. Chlorine was used as a bleaching agent in the 17th and 18th century textile industry while copperas itself was used as a dye fixative for woollens.

Additional uses of copperas included printers ink, a tanning agent for leather and in the manufacture of gunpowder. This extensive range of uses made copperas a valuable substance and a significant industry developed at places where nodules of iron pyrites occurred in Eocene clay deposits. Such deposits run through the AONB including Copperas Point. This place name and the availability of Eocene London clay is circumstantial evidence that copperas may have been produced here.

Archaeological evidence for such an industry might include: large chalk lined beds (examples were some 40m x 5m x 4m deep at the Tankerton Bay works in Kent) in which the copperas stones collected from the shore were allowed to weather for up to six years; large cisterns to collect the liquor produced (a dilute solution of hydrated ferrous sulphate and sulphuric acid); plank-lined channels; coal-fuelled furnaces; and cooling tanks. Copperas stones are known to have been exported from the harbour in the post-medieval period – in 1637 10 tons of the stones were sent to London.

Limekilns

Limekilns produced quicklime (calcium carbonate) by heating limestone and coal. Permanent lime kilns were built of stone or brick. After the quicklime had been exposed to the atmosphere for a period to absorb moisture it could be spread on fields in order to neutralise acidity in the soil and break up heavy clay soils.

On the 1839 Bosham Tithe map field 622 is centred on 481067 101722 and is recorded as 'Lime Kiln fields' on the Apportionment, suggesting the presence of a limekiln nearby.

Rope making

The rope industry served the Portsmouth Dockyard. Rope-walks consisted of a 'twisting machine,' carrying several revolving hooks and a 'sledge,' with one fixed hook. Groups of yarns ran between these two sets of hooks which could be up to 300 m apart. The revolving hooks were turned either by hand or by a small motor, twisting the yarns together to form a strand. A rope-walk (Chi SMR 141; 475460 105630) ran south from the present A259 to the Round House (47544 10571 to 47547 10547). This was in use before 1875 to the 20th century, but rope walking is known on the site prior to 1786 (Rudkin 1974). Another rope-walk at Hermitage (Chi SMR 3505; 475642 105749) is shown on the 1st edition 6" map (Fig 34).

Fishing

In the bay at the head of Prinsted Channel, aerial photography taken in 2000 (Aerial photos (j), (k); NMR 18705/05) show a number of rectangular features which may be oyster beds (Fig 35), although they are not featured on the 1st edition OS map. A ribbon of gravel, separating the bay from Prinsted Channel, is marked 'Hard' on the 1st edition OS (Aerial photo (i); NMR 18705/05) and is also represented on the modern OS, although unlabelled. This ribbon of gravel is probably the Cuts, an old sea wall (Anne de Potier pers comm.). The features that may be oyster beds are in two groups. The group running northwest-southeast is the more complex and consists of a number of rectangular structures, centred on 476760 104900. The second group is less extensive, and seems to consist of two rectangular structures and a possible circular structure on the northwest edge of the ribbon of gravel. The second group is centred on 476820 104630.

Over 50 rectangular oyster beds are shown on the 1st edition OS map in the bay at the head of Emsworth Channel. These also feature on the modern OS map as 'Old Oyster Beds'.

Oyster beds (Hants SMR 54,709.00; 473428 101489) are marked on the first edition 6" OS map and consist of 74 oyster beds along the west side of Gutner Point. Four square structures here, also visible on the millennium aerial photographs, are also oyster beds (Aerial photo (c); NMR 18705/28). The oyster beds formed a part of a major local industry that was wiped out in *c* 1906 by extremely hard frosts that killed all the oysters.

Fowley Island is shown on the 1st edition OS as a raised island '1.892 Acres', irregularly rectangular and orientated roughly east-west. This was adapted for use for oyster beds, and these can still be seen in aerial photographs (Aerial photo (g); NMR 18119/04 taken in 1998). The Westwood's Road causeway (see below) led out to the island.

Sub-tidal features

Harbour piles survive in Chichester Channel (Chi SMR 203; 477600 101000). These are the remains of an abortive attempt to construct a road and seabank from Chidham to Pilsey. During construction a gale and high seas carried away the bank (Rudkin 1974). The bank is shown on the 1st edition OS and is also marked as two closely parallel lines of 'Old Piles' on the modern OS map. The bank can also still be seen in aerial photographs taken in 1998 (Aerial photo (l); NMR 18097/20, NMR 18119/24).

A causeway still shown partially on the modern OS map is marked as 'Westwood's Road' on the 1st edition OS, although it is known today as 'Fisherman's Walk' (Anne de Poiter pers comm.). The causeway ran south from Emsworth down Emsworth Channel to join an irregular area of gravel at 474605 104605 on Fowley Rithe. The causeway is also visible on aerial photos (NMR aerial photo (h), the causeway running from 474900 104930 to 474810 104870 then turning roughly south to 474650 104560). The causeway evidently ran to the oyster beds on Fowley Island. However, today its path is cut before it reaches the island by the fast-flowing Fowley Rithe.

Canals and docks

The Sussex section of the Portsmouth-Arundel Canal (Chi SMR 2485; 482660 101160) runs from Birdham to Ford. The canal, which was 9.1m wide and 2.4m deep to allow sea-going vessels to reach Chichester, was opened in 1821. Egremont Bridge (Chi SMR 3404; 482900 101050) was a swing footbridge across the canal, removed in 1940 as a defensive measure, but found lying beside the canal to the north of its original position after the War.

In 1817 and 1818, Acts of Parliament were passed providing for the construction of the Portsmouth and Arundel Canal, which, together with other Canals and Navigations, would link London with Portsmouth. The Chichester canal formed part of the Portsmouth/Arundel route, which was designed by the engineer John Rennie (1761-1821) and built at an eventual cost of £170,000. Constructed as a ship canal to a width of 50' and depth of 8' the line between Chichester and the harbour was capable of allowing passage for vessels of up to 100 tons.

The main reason for the construction of the canal was to avoid the difficulty experienced by coastal vessels, particularly colliers, which had to transfer cargo into lighters at Itchenor for onward passage to Chichester. On arriving at Dell Quay dock (Chi SMR 2381; 483500 102860), cargo had to be off-loaded again, this time into wagons, before it could reach Chichester by road. The scale of the problem is indicated by the 18,000 tons of coal and 1,650 tons of other cargo shipped on this route in 1816.

Construction work moved quickly following the Acts of Parliament and in late December 1821 nearly 1,000 spectators watched the filling of Southgate Canal basin in Chichester, although the Canal itself was not formally opened until April 9th 1822. The misfortune, which dogged the canal company, manifested itself on this less than auspicious occasion when the steam tug *Egremont*, towing a procession of vessels, ran aground on a mud bank in the Emsworth Channel. A smaller procession led by the yacht *'Sylph'* subsequently reached the basin to a rousing welcome of cannon fire and music and the cheers of crowds.

The early commercial hopes of the canal were not realised and whilst estimated cargoes of 55,000 tons per annum had been expected between Portsmouth and London, the best year yielded a total of 3,650 tons consisting mainly of coal, grain and timber. By 1840 the rapid

growth of the faster railway services and the coastal steam packets finally killed off through traffic to London. The last recorded cargo of 6 tons of groceries was carried from London to Chichester in a barge called *The Trout* in that same year.

However, the depth of the Chichester ship canal enabled trading to continue for another 70 years. Whilst the tonnage of cargo increased over the next 20 years, the toll charges declined and in 1874 revenue totalled only £46.

On the 1839 Tithe map for West Itchenor, field 35 centred on 478736 099430, is referred to as 'Chalk Dock marsh' on the Apportionment. This is near 'Chalkdock Point' marked on the modern OS map.

Mineral extraction

A large gravel pit is marked at the southern tip of Thorney on the 1875 1st edition OS map, occupying an area some 350m E-W and 64m N-S. It was centred on 476720 101015, and the west part of this extensive feature was subsequently cut off by the sea wall running along the west coast of the island.

Marl was extracted from what is now Cullimer's Pond, north of Cobnor House on the Chidham peninsula, in the 18th and 19th centuries (Anon ?1960s). Marl, which is a crumbly mixture of clays, calcium and magnesium carbonates, was spread on local fields to increase their lime content.

There are likely to be other pits in the AONB used to extract gravel, marl and other materials.

Turnpikes

In the post-medieval period, tolls were often levied on roads. A toll house (Chi SMR 104; 478310 105460) was associated with the Cosham to Chichester turnpike road.

Non-industrial buildings

Union Chapel, Bosham (Chi SMR 3534; 480502 104116) is marked on the 1st edition 6" OS map. The brick and flint farmhouse at Hook Farm (Chi SMR 2495; 483040 102740) is claimed to be Tudor (Chichester Observer (House Sales), 24th August 1995).

The Black Barn, Warblington (Hants SMR 36,905.00; 472825 105444) is a 'Turin' or L-shaped, aisled barn – a plan more typical of East Kent. Its construction is relatively late (mainly 18th century). The framing of the barn includes reversed braces, clasped side-purlins and queen struts with the 'half queen strut' arrangement in the aisles that is a typical East Wessex feature. It is a Scheduled Ancient Monument (SAM number HA 547).

Wade Court (Hants SMR 52,016.00; 472000 105300) in the mid 19th century was a thin rectangular parcel of land, amounting to about 42 hectares (103 acres), between the Lymbourn stream in the east and Pook Lane to the west. First mention of Wade is found in Domesday Book when it was probably part of the manor of Warblington. At the beginning of the 19th century a larger house, and many outbuildings were built, and the Lymbourn

stream dammed to form a fishpond. Between 1833 and 1840 Wade Farm became Wade Court.

At Apuldram, Rymans is an historic post-medieval house (Chi SMR 2338; 484180 103220) with enclosed gardens (Chi SMR 2340; 484180 103220).

At Redlands Farm, part of the original Elizabethan timber frame survives (Chi SMR 2; 479730 099630), with remains of a ditch that may also be post-medieval in date.

Agricultural features

As farming practices changed to reflect the increasing mechanisation of agriculture, larger fields became more efficient and field boundaries disappeared as smaller fields were integrated into larger areas. A number of former field boundaries can be identified in aerial photos of the AONB. Most are likely to have been removed in the post-medieval or modern period and some of the boundaries may have dated to earlier periods. The boundaries that do not feature on the 1st edition OS mapping may have been removed before the mid 19th century.

In fields adjacent to the coast near the village of North Hayling, aerial photos taken in 1976 show a group of linear features with other more irregular features, including one that is roughly circular (Aerial photo (d); NMR 926/240). The features, which are centred on 473620 102800, are not shown on either the 1st edition OS or modern OS mapping. They are possibly drainage ditches or (perhaps less likely) structures associated with salt making.

On Thorney Island, aerial photos taken in 2001 show a cropmark running along the same line as a track or path shown on the 1st edition OS map (Aerial photo (aa); Chi SMR).

Further east, near Broadbridge Farm, a field boundary centred on 480790 104845 identified in aerial photos taken in 1982 is likely to be that shown on the 1st edition OS mapping (Aerial photo (n); NMR 2120/1144). Nearby, a rectilinear cropmark that may also be a field boundary does not correspond to a feature on the 1st edition OS mapping (Aerial photo (o); NMR 2120/1144 taken in 1982). This cropmark runs from 480770 104945 to 480800 104950.

A number of former field boundaries and other features were also visible near Fishbourne. Two former field boundaries running roughly north-south and identified in aerial photos taken in 2001 both featured partly on the 1st edition OS mapping (Aerial photo (hh); Chi SMR). Two east-west running cropmarks nearby were also likely to be the field boundaries shown on the 1st edition OS mapping (Aerial photo (q); NMR 2120/1149 taken in 1982). These were centred on 482470 104640. Of the other cropmarks in this area, two running roughly east-west (Aerial photo (t); NMR 2120/1159 taken in 1982) were likely to be drains or small streams shown on the 1st edition OS mapping; and one running north-south (Aerial photo (r); NMR 2162/1015 taken in 1981) may have been a field boundary or drain marked on the 1st edition OS. A path shown on the modern OS map (Aerial photo (s); NMR 2120/1157 taken in 1982) delineated the southern extent of the millpond at the top of Fishbourne Channel on the 1st edition OS.

Although not featured on the 1st edition OS mapping, a cropmark near Bosham Hoe was likely to be a continuation south of Fletcher's Lane (Aerial photo (cc); Chi SMR taken in 2001). A field boundary southwest of Bosham featured on both the 1st edition OS and modern OS mapping, and so is likely to have been removed in the fairly recent past (Aerial photo (ff); Chi SMR taken in 2001).

Aerial photos show that a number of field boundaries have been removed in the area between West Itchenor and Birdham. A field boundary (Aerial photo (dd); Chi SMR taken in 2001) was shown on both the 1st edition and modern OS mapping, so was likely to have been removed fairly recently. In contrast, old field boundaries near Birdham and Shipton Green, were not shown on the 1st edition OS (Aerial photos (ee), (kk); Chi SMR taken in 2001). A former field boundary near Itchenor Gate Farm, was featured on the 1st edition OS (Aerial photo (ll); Chi SMR taken in 2001).

A field system at Walnut Tree House and at Emery Cottages consisted of shallow depressions and was ploughed out in the 1960s (Chi SMR 6, 9; 478400 099170, 479000 099400 respectively).

Linear cropmarks near East Head, (Aerial photo (v); NMR centred on 476820 098400) consisted of a central feature running roughly northwest-southeast, with two shorter branches either side. These features, not marked on the 1st edition OS, may have been drains.

Historic parks and gardens

A number of historic parks and gardens date to the post-medieval period. Long neglected, the study of such sites is becoming increasingly popular and important. On Thorney Island, a park (Chi SMR 194; 476700 102500) is shown on the 6" OS map of 1872-4. An historic garden in Chidham (Chi SMR 237; 479100 103800) consists of yew and hornbeam hedges, bulbs, rock garden and flowering shrubs bounded by a large private nature reserve. At West Itchenor, the garden of Pilgrim's Cottage is also of historic interest (Chi SMR 211; 479820 101300).

Cemeteries

The date for the creation of the cemetery near to Wade Court (Hants SMR 52,362.00; 472800 105400) is uncertain, although it is sometime between 1870 to 1939. A rectilinear feature (Hants SMR 54,962.00; 472560 105550) to the north west of the cemetery and of unknown function is shown on the Warblington Tithe Map of 1841, as is a house (Hants SMR 54,961.00; 472540 105700) on Pook Lane.

Stray finds

A number of post-medieval stray finds have been recovered from the Bosham area. These include a boatswain's silver whistle (Chi SMR 2513; 480000 104000), dated to the 17th century, and a post-medieval potsherd with internal green lead glaze (Chi SMR 2408; 482930 102240). A cannon was recovered in 1996, south of Thorney Island, its general location recorded as 'between Stocker and Fishery buoys' (note in CHC records dated January 2004). The cannon was taken to the Royal Armouries at Fort Nelson and was still there in 2000. Near Langstone, 8 fragments of 19th century clay pipes (Hants SMR 32,466.00; 471800 105000) were also recovered.

Research questions

In the post-medieval period, much of the work undertaken to date has been of a disjointed nature and the result of chance discoveries when looking for earlier remains rather than actively seeking sites that may answer specific questions. In many instances there has been too little work to enable specific research aims to be formulated, and research aims can only be of the most general kind. Initial fieldwork is needed to test the quantity and quality of the archaeological resource. This would include the systematic location and recording of extant structures of the period to ensure the long term preservation of information and to facilitate a secure database from which to formulate future strategies.

Mills have received little archaeological attention. The AONB is especially important for tide mills, of which few are known. Future research could be aimed at surveying and even excavating standing mills where appropriate.

There has been little detailed fieldwork into the post-medieval brick industry. Brick and tile kilns should be surveyed, not neglecting the remains of other structures, such as pug-mills and drying sheds that may lie nearby.

Research could also be focussed on other industries in the AONB, such as the salt industry and the fishing and oyster industries which have all had important impacts on the economy of the Harbour in this period.

Historic boat yards and wharfs are under increasing threat. Quays were once important nodal points of the harbourscape, but are now invisible. Survey of these features is important before they are lost. A number of wrecks and hulks have also been identified which are more accessible from the shore. These should also be surveyed.

Current knowledge of vernacular buildings could be synthesised into a cohesive unit before undertaking further research and field survey.

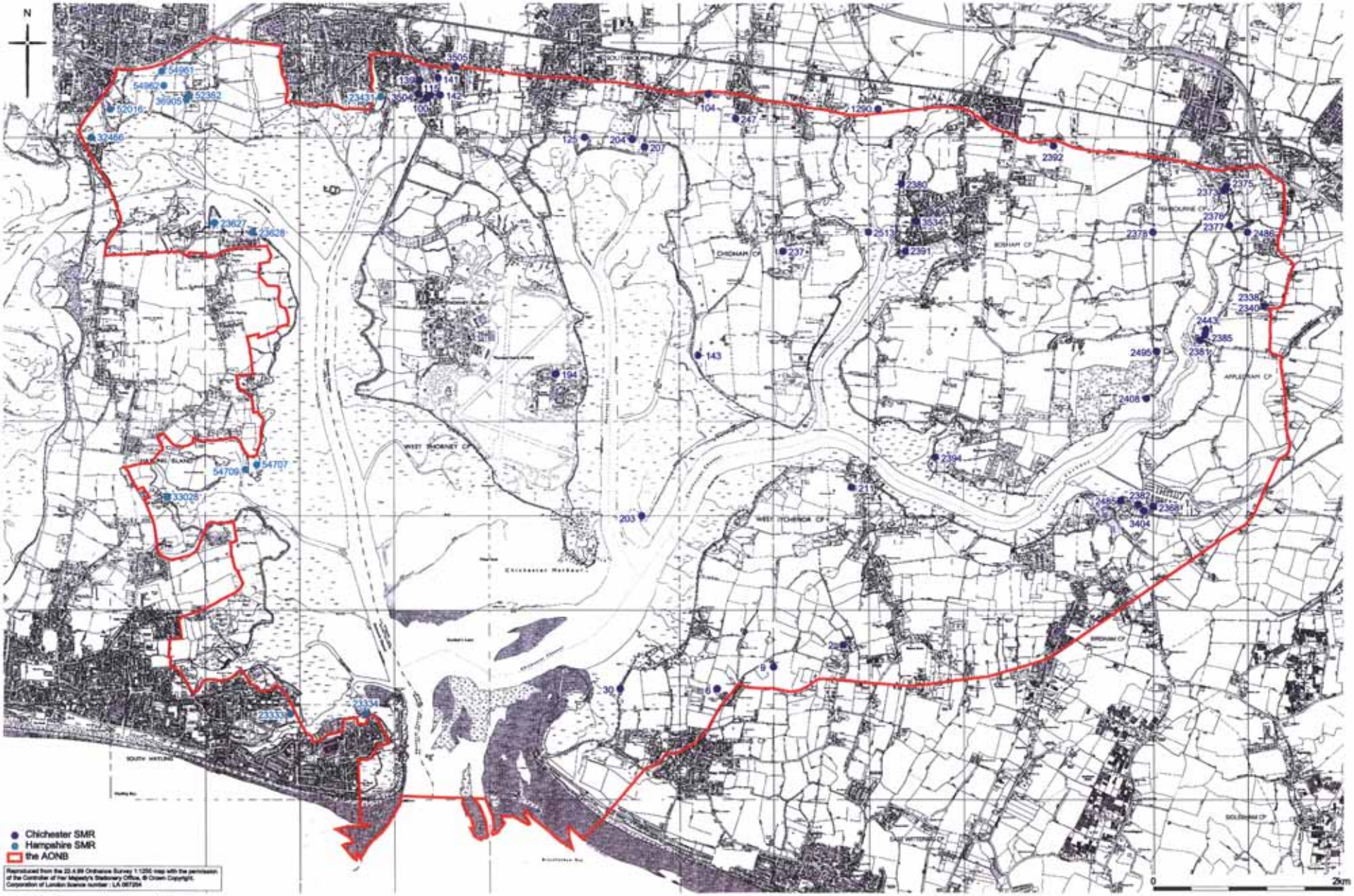

Fig 20 Post-medieval period map

Fig 21 The Saxton map of 1575

Fig 22 The Speed map of 1611

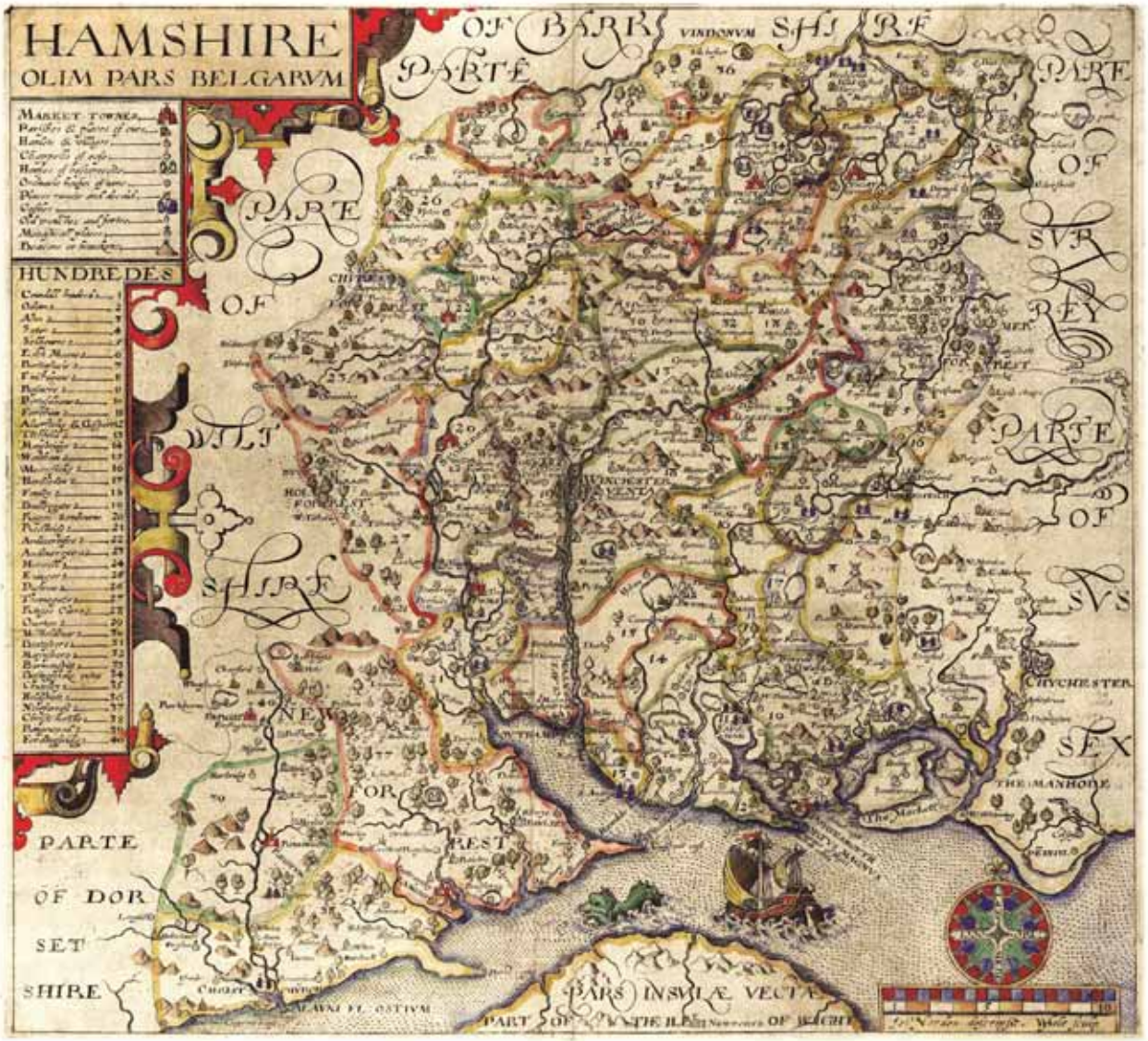

Fig 23 The Norden map of Hampshire of 1609

Fig 24 The Morden map of Hampshire of 1695

Fig 25 The 1695 Morden map of Chichester

Fig 26 The Kitchen map of 1750

Fig 27 The Bowen map of Chichester of 1756

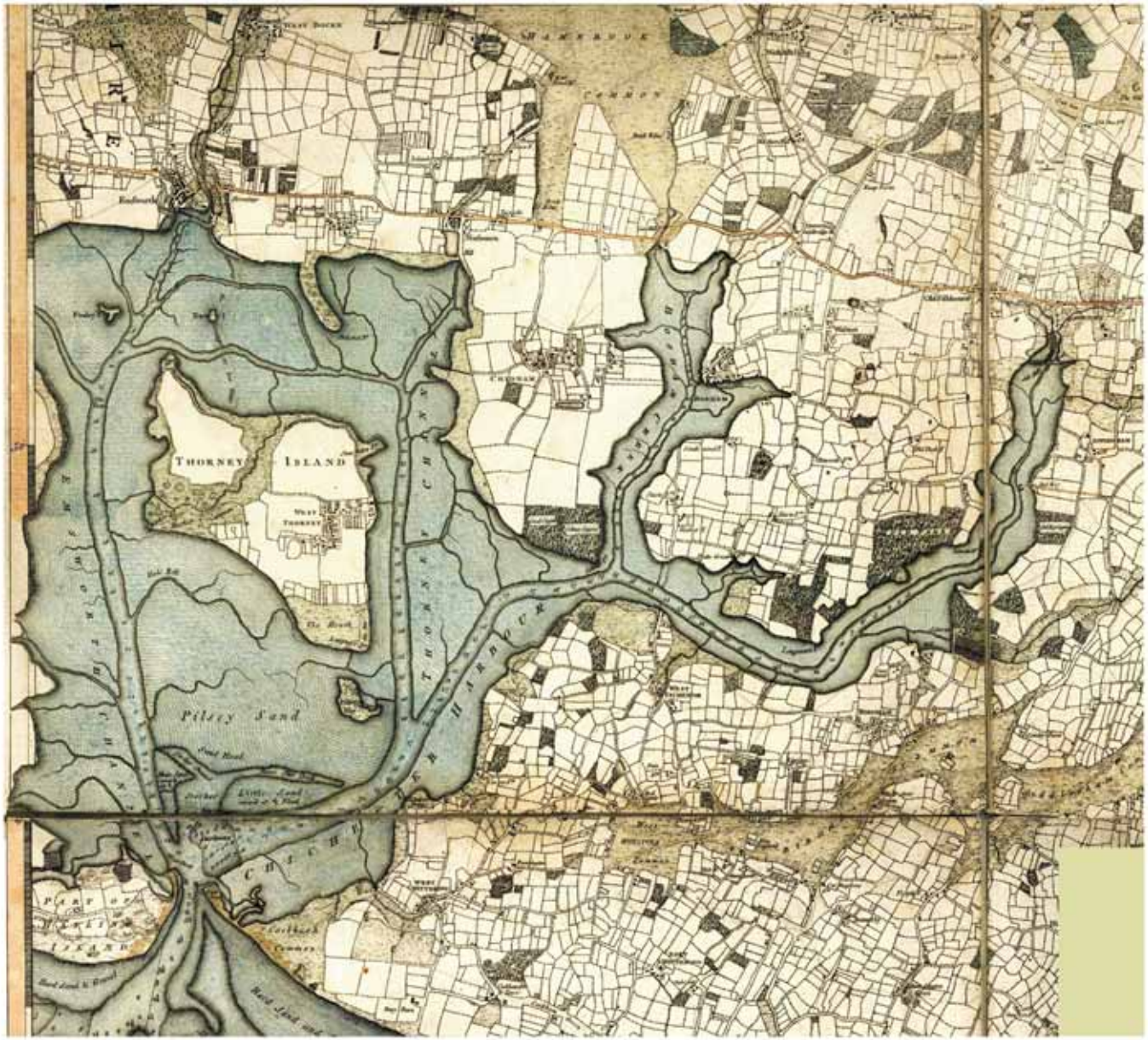

Fig 28 The Yeakell and Garnder map dating to the 1780s

Fig 29 The Capper map of 1808

Fig 30 The Paterson and Fareham map of 1811

Fig 31 The Chichester map by Dugdale of 1840

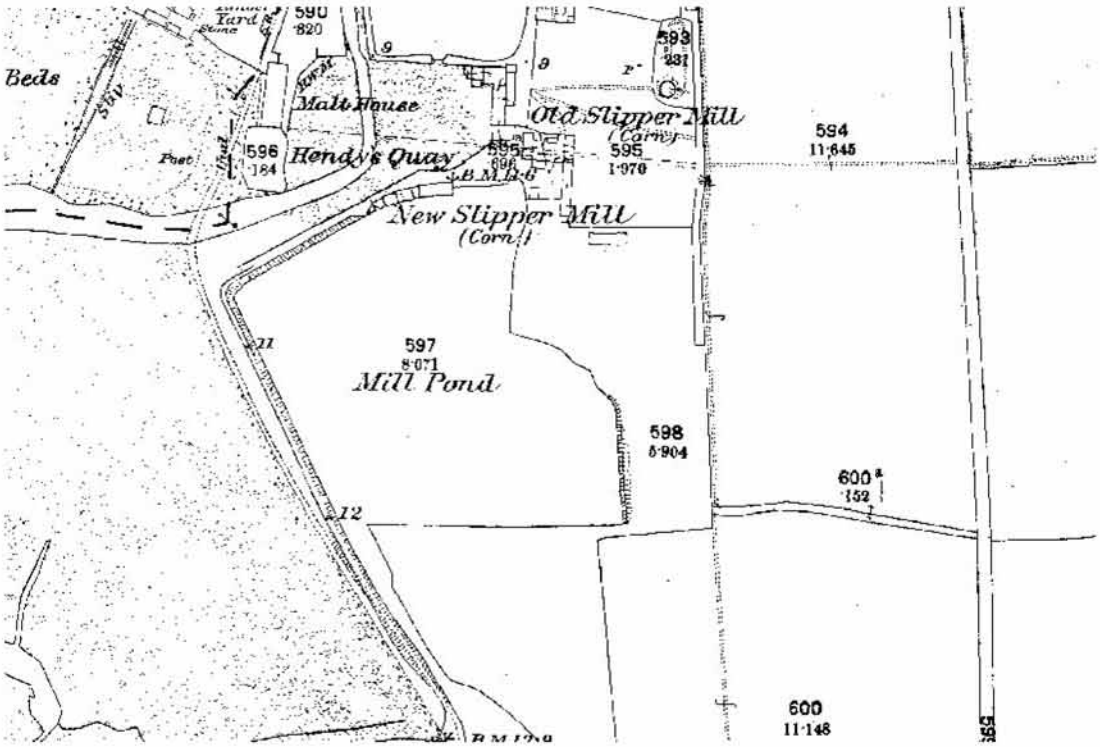

Fig 32 Slipper Mill shown on the 1st edition OS

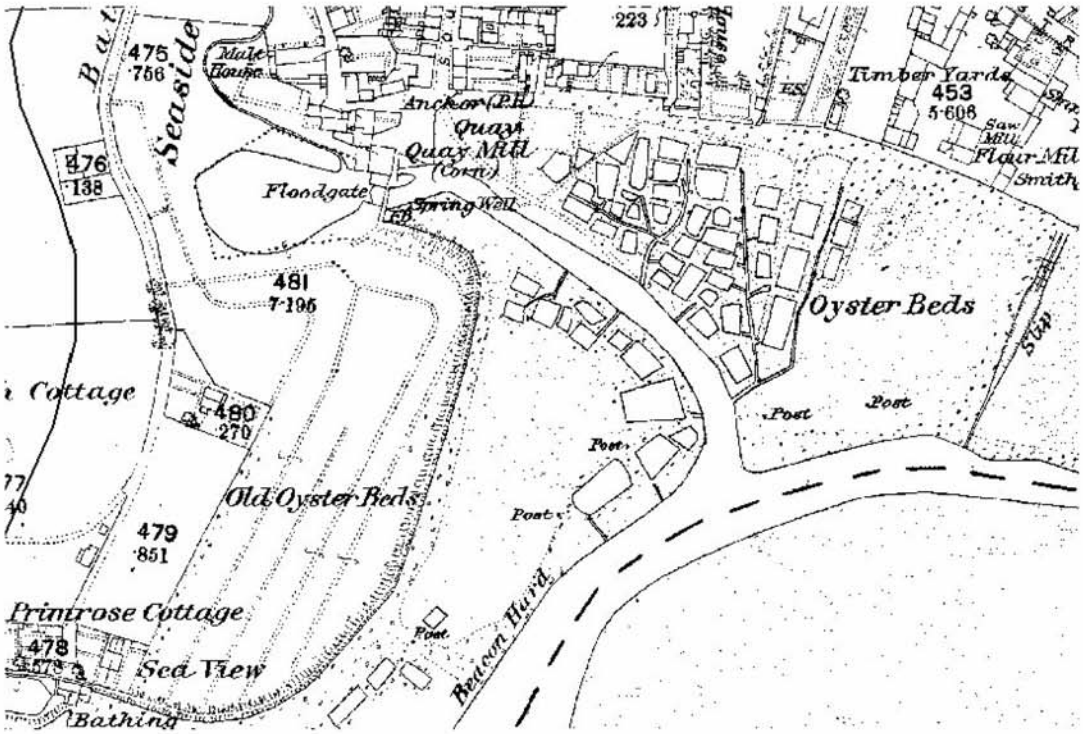

Fig 33 Quay Mill shown on the 1st edition OS

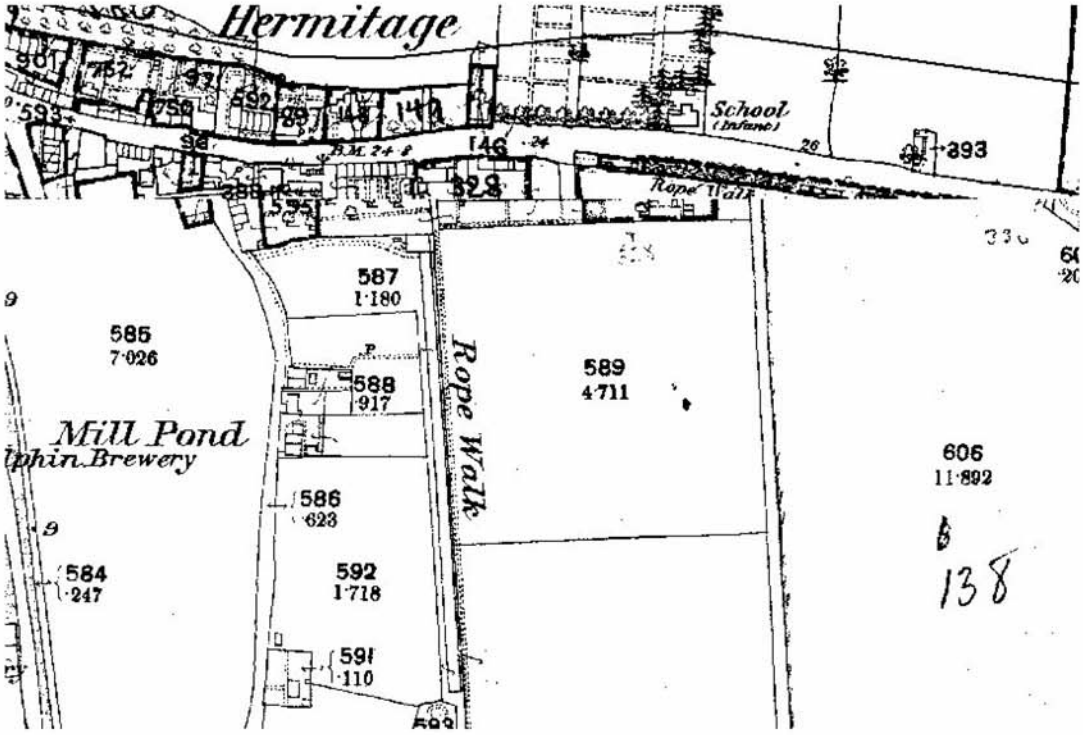

Fig 34 The rope walk at Hermitage shown on the 1st edition OS