Suffolk County Council

ARCHAEOLOGICAL SURVEY REPORT

SCCAS REPORT No. 2010/156

Bridge at Sibton Abbey, Sibton

SBT 034

D.Gill

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Summary

A record was made of an 18th century bridge and the remains of its medieval predecessor at Sibton Abbey, Sibton. The bridge stands within private grounds and provides access across the River Yox to the site of the ruined Cistercian abbey. The abbey ruins are Grade-II listed and a Scheduled Ancient Monument but the bridge itself stands outside the designated monument area. The wing of the bridge on the upstream south bank has recently collapsed due to the erosive effects of the current which has exposed the soil core of the bridge abutment, seriously endangering the bridge's future.

The current bridge was built in 1770 by John Freston Scrivener Esq. to replace the previous bridge which was built as part of Sibton Abbey. The bridge would have been visible from the house which the Scrivener family had had built on the site of the abbey during the first half of the 17th century. Hodskinson's map of Suffolk published in 1783 shows the river swollen to a wider body of water and the elegant design of the new bridge would have been constructed to contribute to this enhanced vista.

The size and character of the bricks within the earlier bridge suggests that it is medieval and was constructed probably during the 12th or 13th century, a time when the clausteral buildings themselves were also being remodelled using a similar brick; however the lack of any evidence of a defining architectural style makes the bridge remnant impossible to date with absolute confidence. The medieval bridge abutment has been described, erroneously, as part of a monastic hospital on the first edition OS (HER no. SBT 001).

1. Introduction

This report provides a record and analysis of an 18th century bridge and the remains of its medieval predecessor at Sibton Abbey, Sibton. The bridge stands within private grounds and provides access across the River Yox to the site of the ruined Cistercian abbey. The abbey ruins are Grade-II listed (LBS 285331) and a Schedule Ancient Monument (SAM No 21437 - old no. Suffolk 67). The bridge however stands outside the designated area of the monument and is, at present, not protected by statute. The wing of the bridge on the upstream south bank has recently collapsed due to the erosive effects of the current which has exposed the soil core of the bridge abutment, seriously endangering the bridge's future. With this is mind English Heritage has commissioned and funded the recording of the bridge to preserve by record the structure. The work was undertaken with the kind permission of the landowner Mr Levett–Scrivener on the 5th July 2010.

The slumped north bank of the river adjacent to the bridge was removed by machine under the direction of the Environment Agency. This operation was undertaken on the 16th April 2010 in the presence of a monitoring archaeologist, funded by the Environment Agency.

2. Site location

The bridge spans the River Yox *c.*0.5km west of the village of Sibton at TM 3618 6964 (Fig.1). The ruins of the abbey are situated on a terrace about half way up the valley side north of the river on the 20m contour and about 250 metres north east of the bridge. The bridge is approached on the south side by a track way which is raised above the surrounding low lying fields on a slight causeway.

The abbey ruins lie in an area of woodland. The fields to the south which lie within the area of the SAM are laid to grass whilst those to the north-west and south of the bridge were under cultivation at the time of the survey; the banks of the river were heavily vegetated.

The surface geology is slowly permeable calcareous clayey soil.

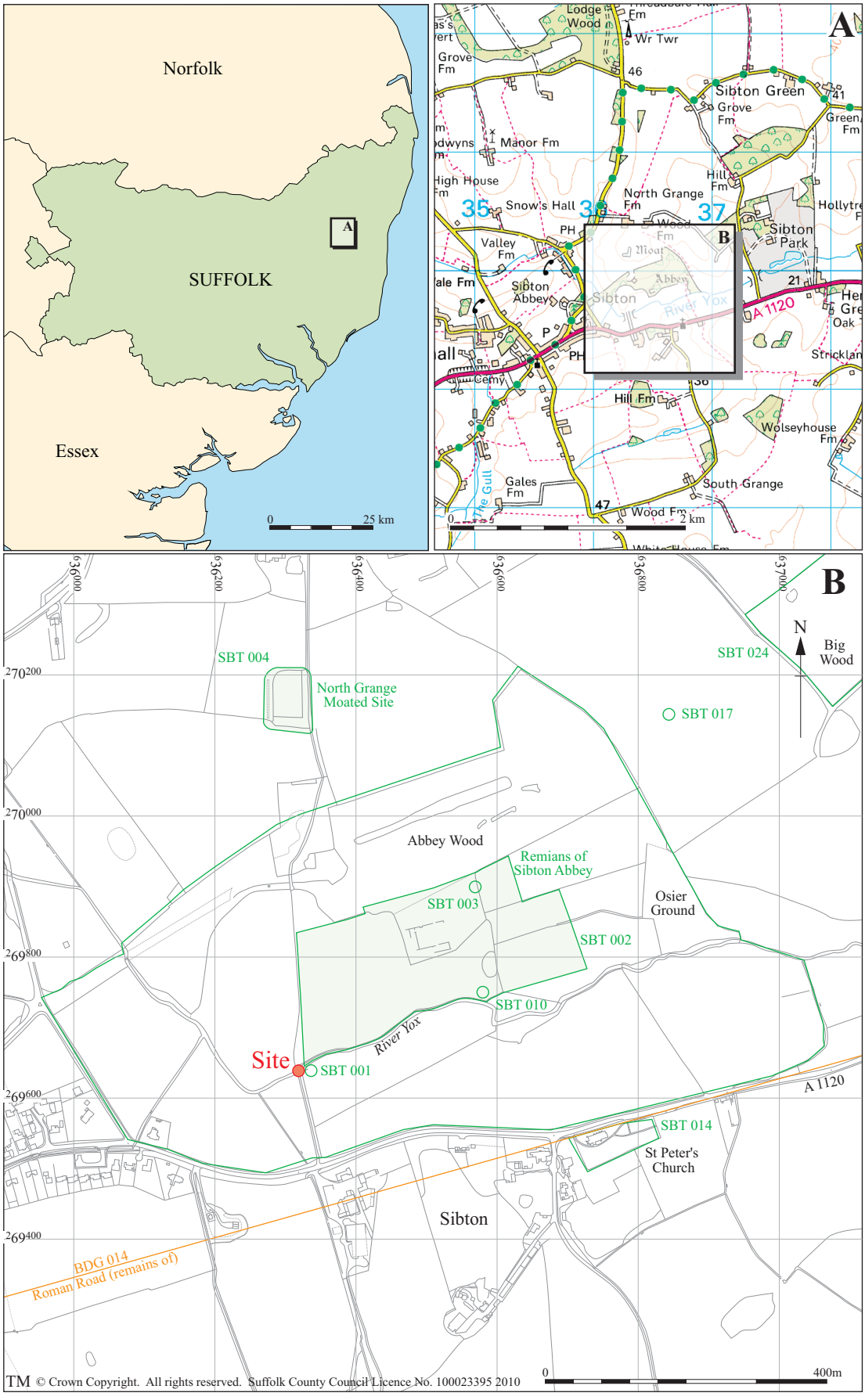


Figure 1. Site location, showing Medieval sites marked on the County HER and the Area of Schedule Momument shaded green

3. Summary of the historical background

Sibton Abbey is the only Cistercian house in Suffolk. It was founded by William de Chesney, High Sheriff of Norfolk and Suffolk in about 1150 and was populated initially by an abbot and 12 monks from its sister house at Warden Abbey in Bedfordshire. The Cistercian Order was founded during the 12th century by St Bernard of Clairvaux who believed in a return to the simple austerity of prayer and work; seeking seclusion the Order founded their houses in remote locations. The monastery at Sibton became relatively wealthy and at the time of the Dissolution had an annual income of more than £250. After its dissolution in 1536 it was granted to the Duke of Norfolk and in 1610 was sold to John Scrivener who built a commodious 'good modern' house on the site and was residing there in 1655.

The construction of the house removed the remains of most of the monastery buildings but Cistercian houses follow a set layout and those parts that survive can be identified. Today, all that exists are part of the abbey church's nave south wall and fragments of the claustral range including part of the refectory and kitchens. The long walls of the refectory stand to almost their full height and are pierced by Romanesque round-headed windows which date to the mid-12th century and at the east end of the refectory there is a similarly styled large blind arch. Evidence for later alterations and additions include a finely carved arched recess for the laver (for ceremonial washing) within the cloister south walk; the construction of this is recorded in the abbey's accounts for 1363-4 (EH Schedule Entry. File Ref AA40053/1).

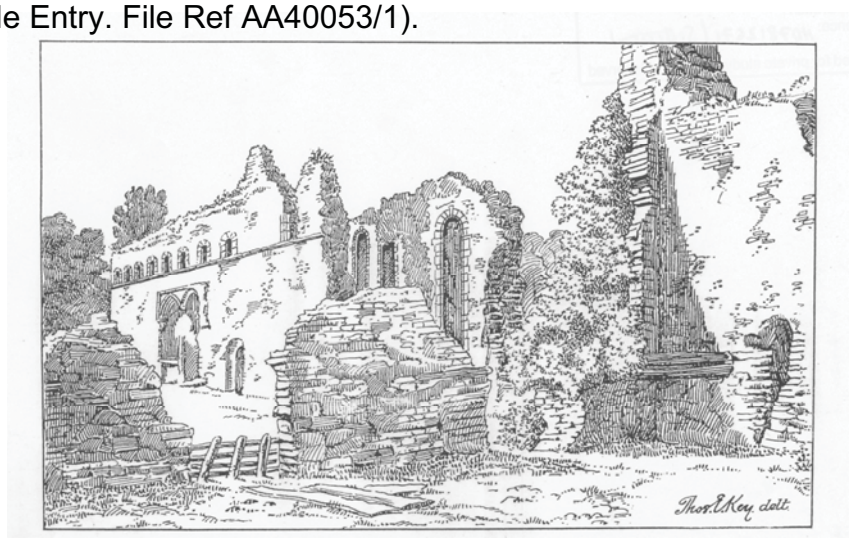


Figure 2. 'Remains of Sibton Abbey' from an engraving by H. Davy 1820

The current bridge is built of brick and the keystone of the bridge is carved ‘JS 1770’. The bridge is approached by a causeway which leads from the Yoxford road (A1120). Opposing the entrance to the causeway is Abbey Farm which forms part of the estate. The farmhouse has an ornate brick-built Dutch gable which dates to the early 17th century and would have been broadly contemporary with the main house built by John Scrivener and, as such, may reflect its style.

The house was pulled down sometime before 1797 when it was replaced by the current Sibton Abbey built 0.75 km to the west of the monastic site.

4. Methodology

The aim of the survey was to secure a record of the current bridge and to examine and provide a record and analysis of the flint abutment and causeway on the southern bank. Scrub vegetation was cleared from around the flint abutment and the soil profile of the bank and causeway, exposed by the collapsed bridge wing, was cleaned by trowel, but otherwise no excavation took place. The site was recorded using a Total Station Theodolite (TST) fitted with an EDM to produce a 3D digital survey. The survey was supported by a photographic record using a high resolution digital camera (300 dpi) and selected detail hand drawing at 1:20. The survey recorded the dimensions, phases of build and repairs of the later bridge and the profile of the north end of the causeway. The survey data was downloaded using LisCad, processed in Auto Cad and converted into MapInfo V9.5 tables, which were used to produce scale plans and drawings for the report. All survey data was referenced to the Ordnance Survey grid and datum.

Prior to the recording of the bridge the bank slump to the west of the bridge was cleared by tracked machine fitted with a wide ditching bucket under the guidance of the Environment Agency. The operation was observed by a monitoring archaeologist and recorded by digital photograph.

The survey data, photographs and site records have been archived in the small and main stores of Suffolk County Council Archaeological Service at Bury St

Edmunds and with the County's Historic Environment and Monuments Record under the parish code SBT 034 and a digital copy of the report has been submitted to the Archaeological Data Service: http://ads.ahds.ac.uk/catalogue/library/greylit.

5. Survey results

Removal of the slumped bank

A landslip of fine silt/sand from the slump of the north bank was removed from the river by a machine standing on the north bank. It removed the silt and fallen 19th century brickwork to return the river to its former courses and remove some of the congestion. The large blocks of brickwork recently fallen from the bridge wing were realigned slightly but left in place to act as a breakwater to guard against further erosion of the south bank. No pre-19/20th century material was disturbed by the operation and no evidence of a previous crossing was encountered.

The bridge survey

Those parts of each elevation not obscured by vegetation were surveyed and the soil section exposed by the fallen parapet and wing was cleaned by trowel and drawn; the results of the work are shown in Figures 3-6 and described below.

The 18th century bridge

The current bridge is a brick-built, single segmental arch with a span of 6.15m (20′ 2″ ft), and the arch springs from a low abutment of five brick courses high and rises 2.98m above the current water's surface (Pls. 1 and 2). It does not cross the river at right angles but at a slight angle to it. The width of the bridge between the parapets is 3.83m (12′ 4″ft), the parapet walls are 1.4m (4′ 3″ft) high and splay at the entrance to the crossing. The bridge is constructed entirely in red brick apart from coping stones along the top of the parapet walls and the keystones which are cut from a pale oolitic limestone. The keystones are inscribed 'JS' after John Scrivener and dated 1770 (Pl. 3). Most of the surviving fabric originates from this date but there have been several phases of repair to the parapet and the replacement of the upstream wing on the south

side. The areas of repair can be identified in the appearance, bonding and size of the bricks and are shown on the elevation drawings (Figs. 4 and 5).

The original structure was built in plain brick made from fine sandy textured clay with grog inclusions which were fired orange-red to purple red and measured 9¼″x 4¼″x 2¼″. The bricks are laid generally in Flemish bond but the pattern varies as required by the shape of the arch or engineering demands. The bricks are bonded with a white lime mortar and there are traces of mortar on the brick face in several places (Pl. 3) suggesting that it once may have been rendered, possibly to create the illusion that it was made of stone. In the more recent past the west elevation has received a concrete render in a misguided effort to consolidate and protect the fabric.

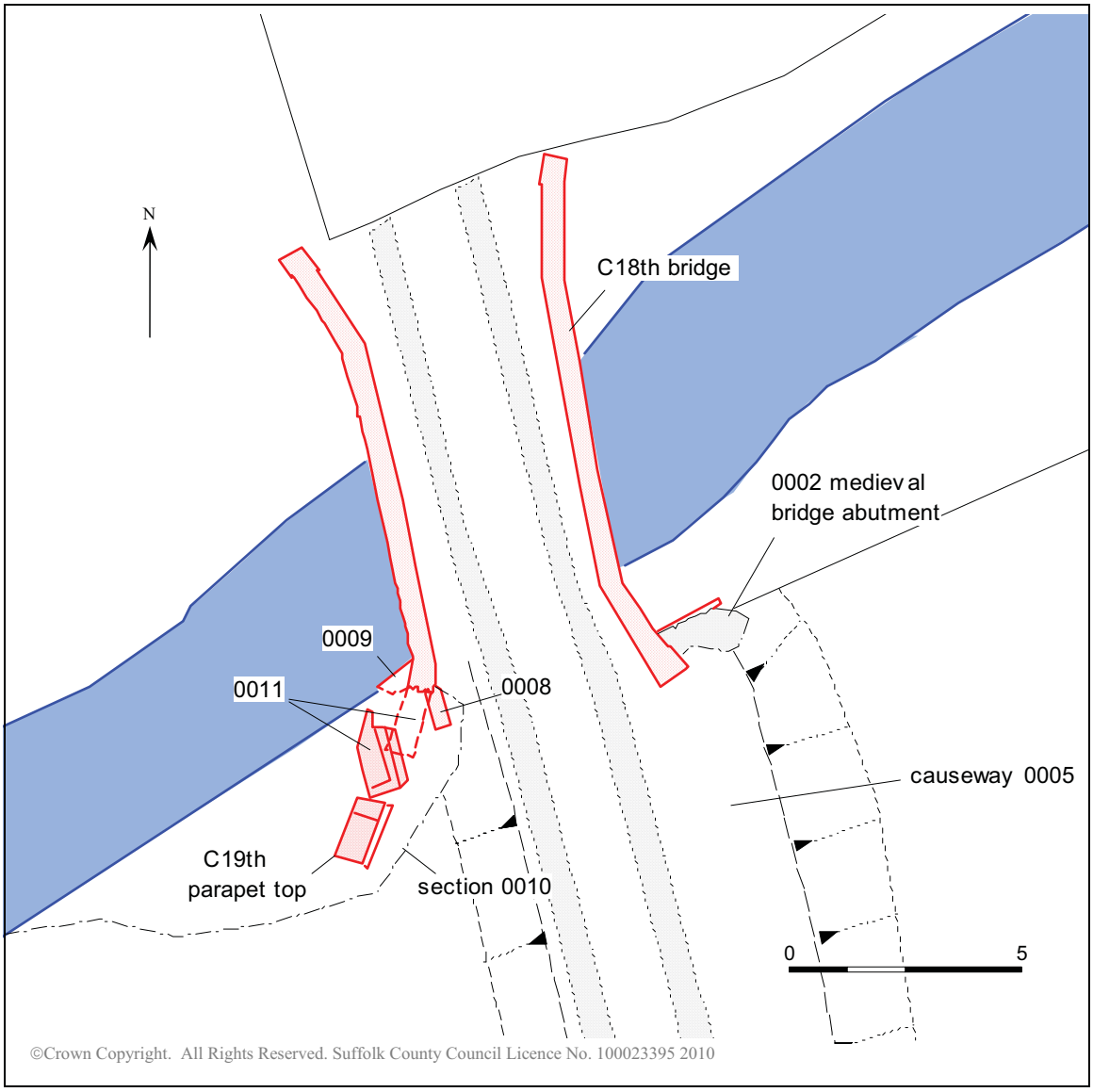


Figure 3. Bridge plan

On the west side of the bridge the now collapsed parapet and wing (0011) at the south end, is itself a later replacement and demonstrates that this part of the

bridge has collapsed before. It was constructed from a mix of re-used brick salvaged from the original and a red-buff coloured brick which measure a standard 9″x 4¼″x 2½″ and are moulded with a shallow square frog suggesting that they date from around the middle of the 19th century (Plate 8). The bricks are bonded with lime rather than a mortar based on Portland cement which would be expected in this application had it post-dated the end of the 19th century. The repair included the parapet wall (0012) and the start of the repair can be seen as a row of brick headers just above the crown of the arch. The wing was constructed without deep foundation but off a simple stepped footing, the base of which comprised a single course of dry-laid, un-bonded bricks, laid on the river bank. In an attempt to ameliorate the design against further collapse a projecting wall (0009) was added in front of the wing to funnel the river through the arch, with the angle between the projecting wall and the wing in-filled with brick rubble. Later a concrete apron was added to the base of the projecting wall in an attempt to stop it being undermined.

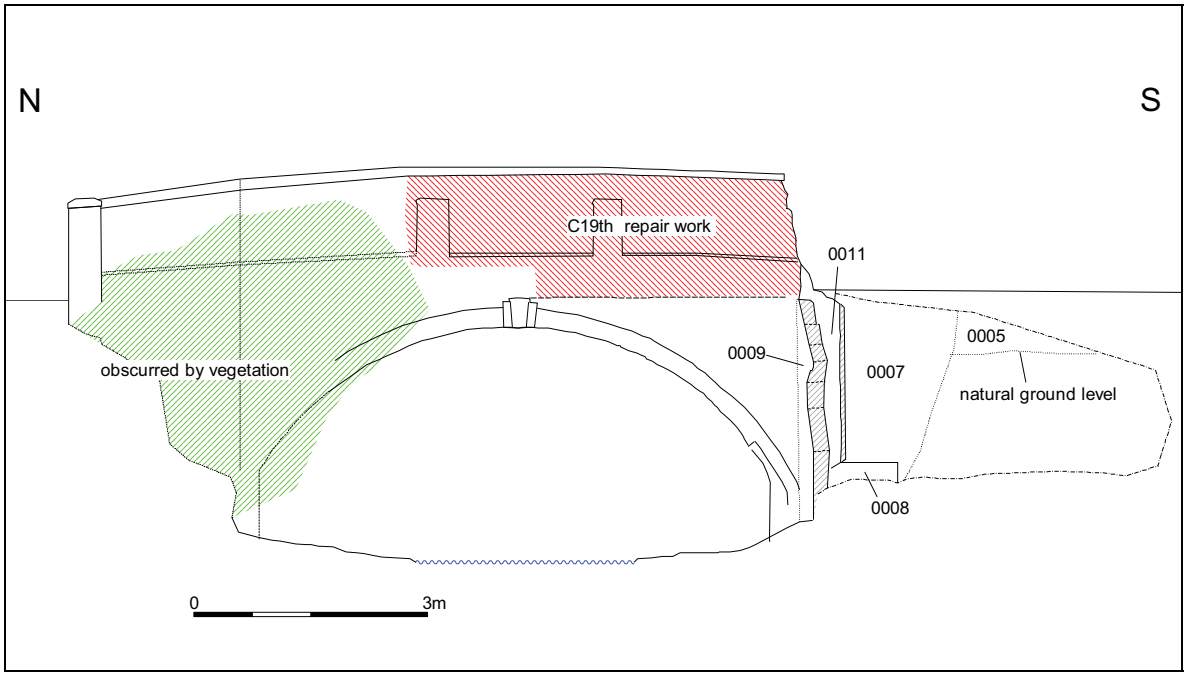


Figure 4. Sibton Bridge, west elevation

Collapse of the wing exposed the soil behind the south abutment (Section 0010 Fig. 6); this showed the soil profile of the causeway (0005) and where it, and the river bank, were cut back to construct the bridge (0007). At the base was a short stub of a bonded brick wall (0008), which is the return of the abutment wall which extends back from the bridge to secure the abutment into the bank. The

wall is a continuation of the line of the west face of the arch, the top of the wall stub is truncated (or unfinished) and it is unclear if the wall once extended to the full height of the bridge and is the remains of the original 18th century wing and parapet. Once the bridge was completed, the 'construction pit' (0007) was backfilled with spoil containing fragments of brick rubble and building flint from the earlier bridge and re-deposited clay silts from the river bed; and these lay in banded tip lines.

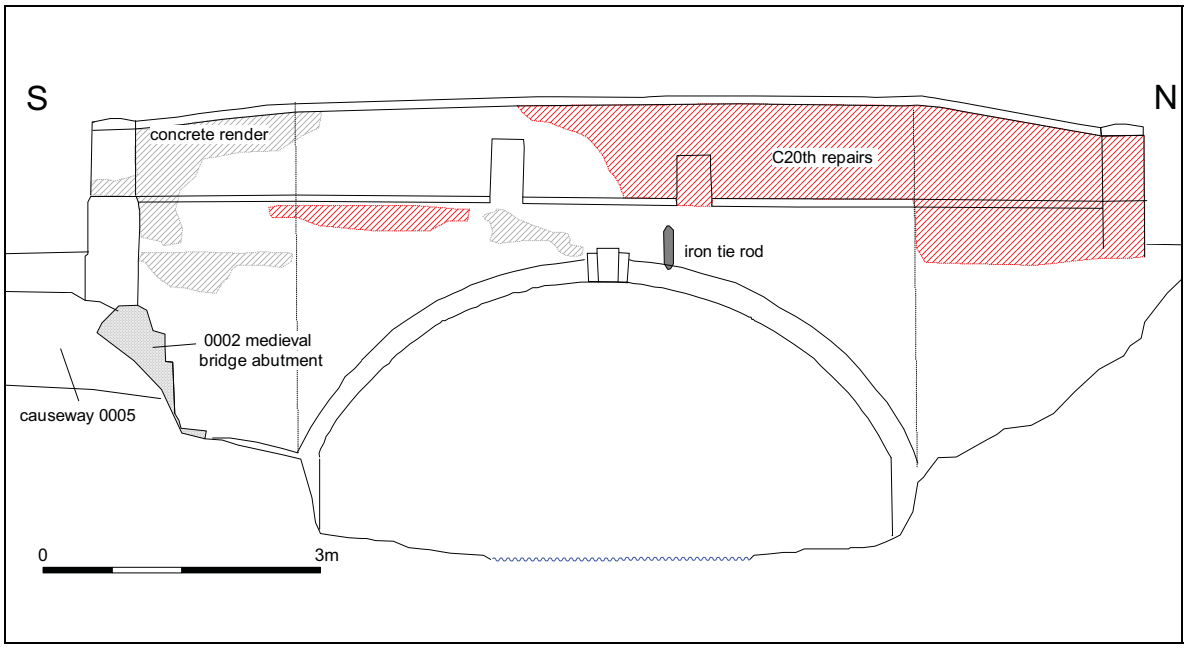
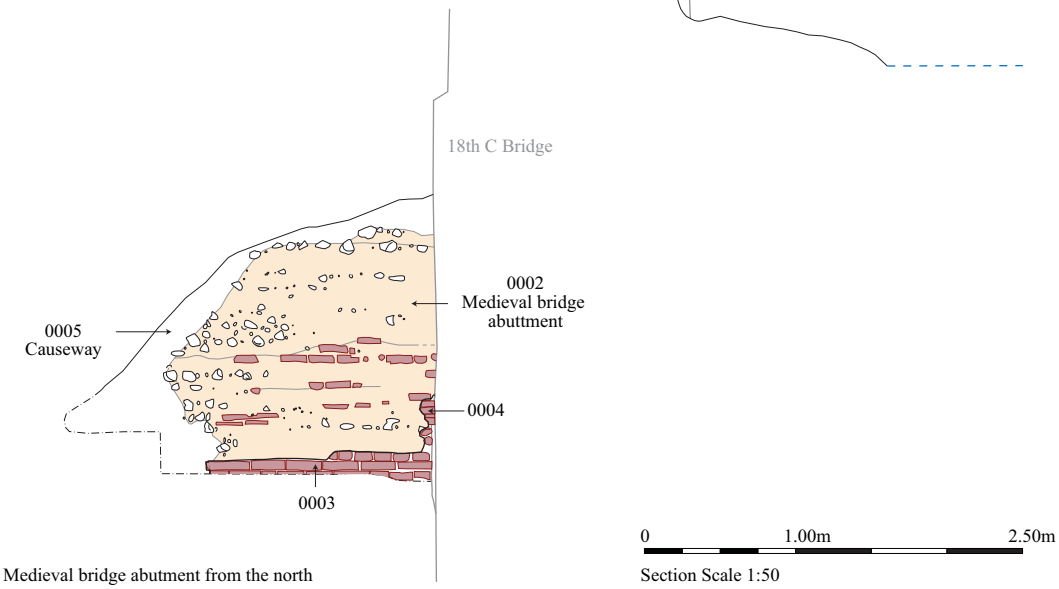


Figure 5. East elevation

The medieval bridge and causeway

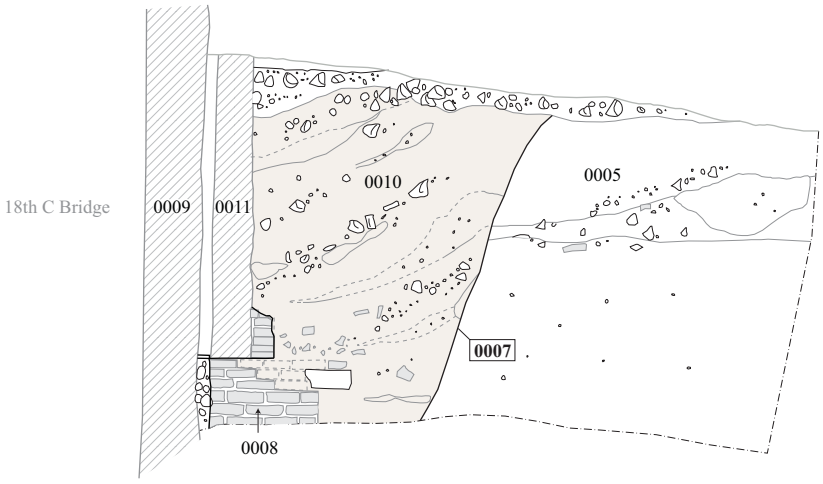
The remains of a flint-built abutment (0002), part of the former bridge, exist on the south bank. The remains lie alongside the east side and are partly buried by the current bridge with the top of the abutment truncated at 0.6m below the level of the current trackway. The abutment consists of a 1.20m thick wall part buried in the bank and set 1.55m back from the abutment of the current bridge and river edge. The fragment has lost almost all of its facing masonry and appears as a rough block of bonded flint, but at its base at least three courses of the former brick facing, remain intact (0003). The bricks were plain, handmade in a red–purple firing sandy clay with burnt flint inclusions and measure 10″x 5⅝″x 2″, and were laid in English-bond. Brick and roof tile were also laid in bands within the core to help stitch the flintwork together. The abutment face is best preserved where overbuilt by the current bridge (0004) and rises vertically for a height of 1.1m, at which level there is no indication of the start of an arch. The

a) Medieval bridge abutment from the east



b) Medieval bridge abutment from the north

Section Scale 1:50



c) Section through medieval causeway and construction cut for 18th C bridge

Figure 6. Elevations of medieval bridge abutment and causeway section

brick size is consistent with early medieval ‘great bricks’ or ‘Flemish bricks’ and suggests a date of the mid-12th to mid-13th century, and similar sized bricks were recorded within the ruins of the abbey itself in the *outer parlour* of the western range (Martin 1990). Coggeshall Abbey in Essex (which transferred to the Cistercian Order in 1148) provides probably the earliest example of ‘great bricks’ in England as they are used in the church dedicated in 1167 (Drury 1981).

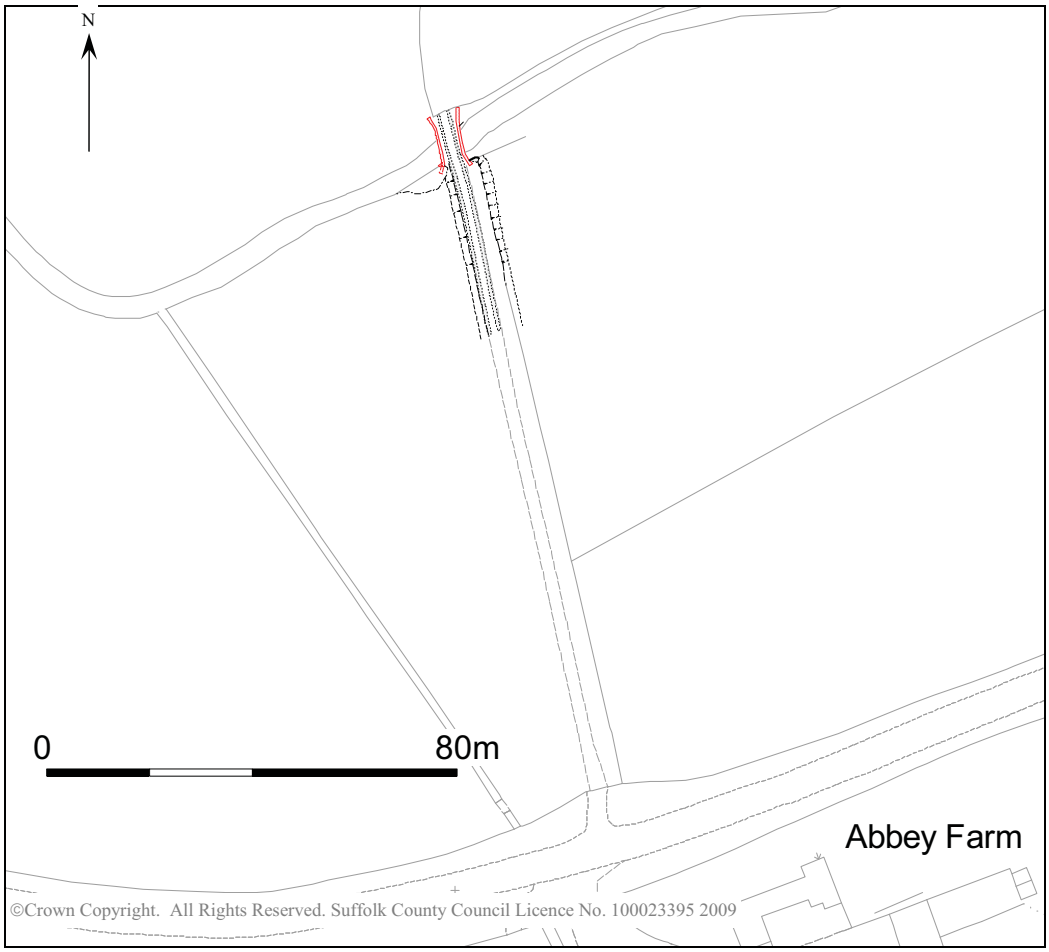


Figure 7. Causeway plot over the OS data (OS survey shown in grey)

The low causeway bank (0005) carries the track way to the abbey across the flood plain of the river and the top of the causeway runs level from the Yoxford road (A1120), which follows the edge of the floodplain, to the bridge. The spot height on the road at the entrance to the causeway is 18.40m OD and the top of the causeway at the bridge is 18.15m OD, where it is 1.45m above the level of the field to the east. Section 0010 (Fig. 6) is a longitudinal slice through the west side of the causeway and shows its make-up of the re-deposited silty clay which includes brick and tile rubble overlying the natural ground level at a depth of

0.95m - the section is not full height as it is within the sloping side of the causeway off the camber. The plan shows that the brick bridge is slightly off-set to the west of the centre-line of the causeway which is aligned with the remains of the abutment of the medieval bridge, with the current track running along the west side of the causeway (Fig. 7). Section 0010 shows the cut for the construction of the 18th bridge truncating the end of the causeway and confirms that the causeway was already in existence when the later bridge was built.

6. Discussion

The current bridge was built in 1770 by John Freston Scrivener Esq. to replace the previous bridge which was built as part of Sibton Abbey. The bridge would have been visible from the house which the Scrivener family had had built on the site of the abbey during the first half of the 17th century. Hodskinson's map of Suffolk published in 1783 (Fig. 8) shows the river swollen to a wider body of water as it passes through the park, and the elegant new bridge would have been designed to contribute to this enhanced vista as well as providing access to the house. Tthere are vestiges of a render on the surface of the brickwork of the bridge and it may have been finished to look like stone.

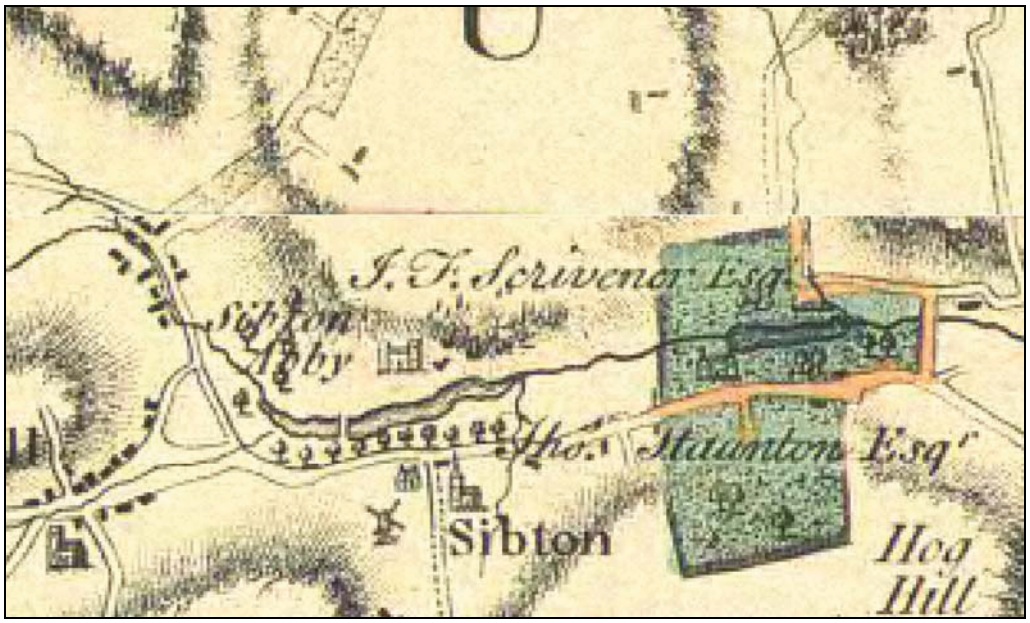


Figure 8. Hodskinson's Map of Suffolk 1783 showing the great house at Sibton Abbey. Note an increase in width of the river in front of the house.

The first edition Ordnance Survey map of 1884 (Fig. 9) shows the driveway which crosses the bridge looping around to the west side of the house to

connect with an east-west driveway, so that the final approach and access to the house is shown as from the west. The OS record card (TM63 NE 1) (Fig.10) notes the remains of another bridge at the west entrance to the grounds and it is uncertain whether this or the surveyed bridge was the main entrance to the grounds, but the surveyed bridge is wide enough for carriages. Estate maps of the grounds which illustrate the layout of the house may exist but these are not held in the local Record Office.

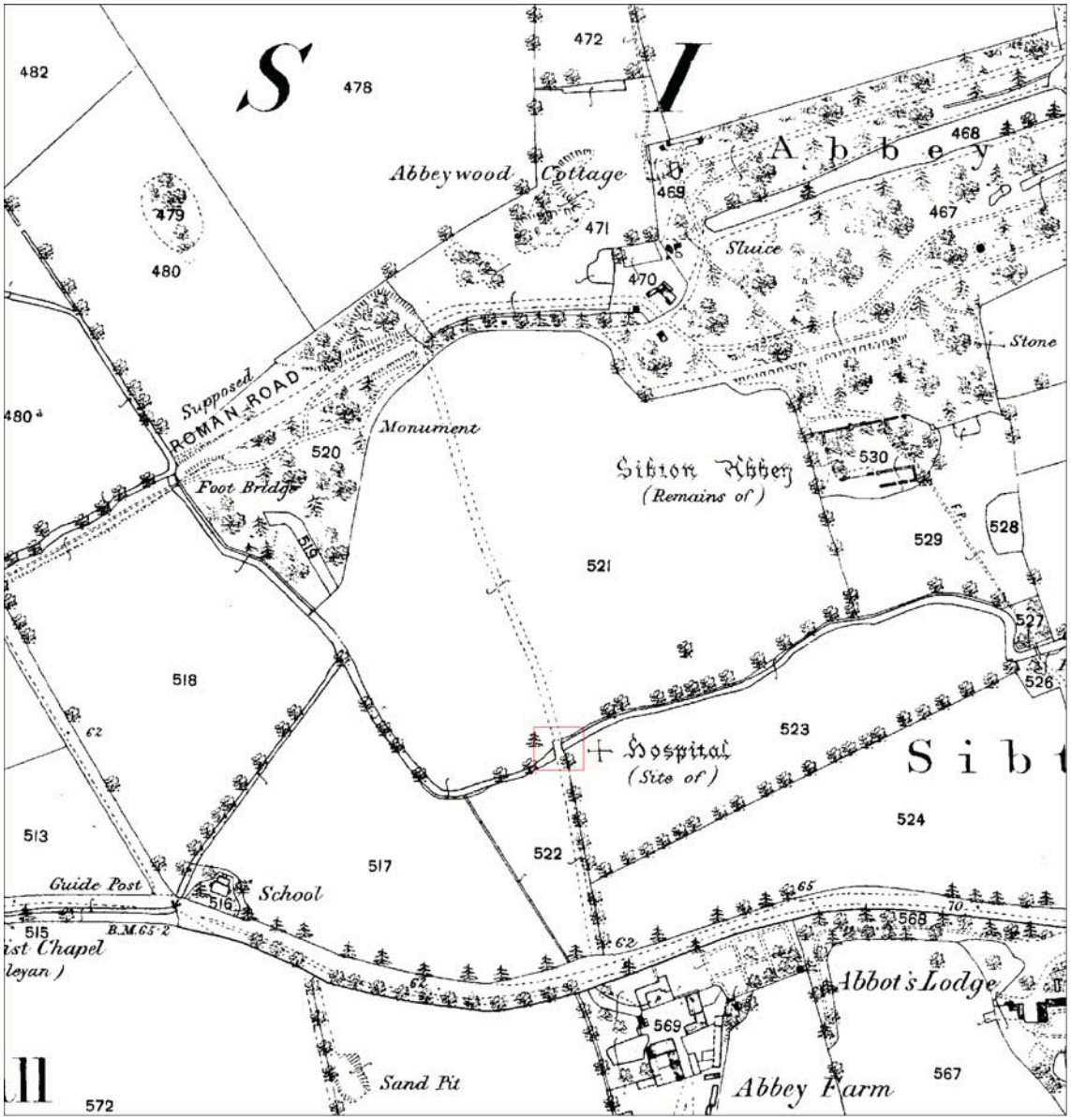


Figure 9. First Edition Ordnance Survey map 1884 showing the site of the suggested medieval hospital (the bridge is marked by a red square)

The size and character of the bricks within the earlier bridge suggest that it is medieval and was probably constructed during the 12th or 13th century, a time when the clausteral buildings themselves were also being remodelled using a similar brick; however the lack of any evidence of a defining architectural style

makes the bridge remnant impossible to date with absolute confidence. The arches of a bridge of this period would be a gothic, two-centred style which would have sprung from close to the pier or abutment base but there is no evidence of that here. A flattened four-centre arch could be built from a high springing point but this form would indicate a post 1350 date. The span required to cross the current north bank from the medieval abutment is 8m and, whatever the arch style, to achieve this distance the bridge would have needed two arches and a central pier were it not to be improbably tall. Eight metres could just be spanned by a single timber in a simple girder-type bridge but it is likely that this too would have been supported at its centre. As there was no indication of any surviving medieval masonry on the north bank or at the centre of the river it is likely that the bank was altered and the channel cleared when the new bridge was built. However any future dredging of the river close to the east side of the bridge should take the possibility of former bridge remains into account and the probing of the river bed to determine if any a central pier exists would be worthwhile.

It has been demonstrated that the causeway is contemporary with, or earlier than, the medieval bridge and is part of the monastic complex. The first edition OS marks the site of a hospital (HER no. SBT 001) adjacent to the bridge on the south side of the river. The medieval bridge abutment is marked on the OS Record Card but it is described erroneously as part of the hospital, the card also notes a spread of tile and flint nearby (Fig. 10). No other references have been found for the hospital and the 1945 aerial photographs show nothing in this spot. The low lying site within the river floodplain and below the causeway makes this an unlikely location for a substantial building; medieval bridges often have chapels associated with them but there is no indication that this is the case here. The area is under cultivation and field-walking of the site could provide evidence to substantiate any suggestion that this was the site of a medieval building.

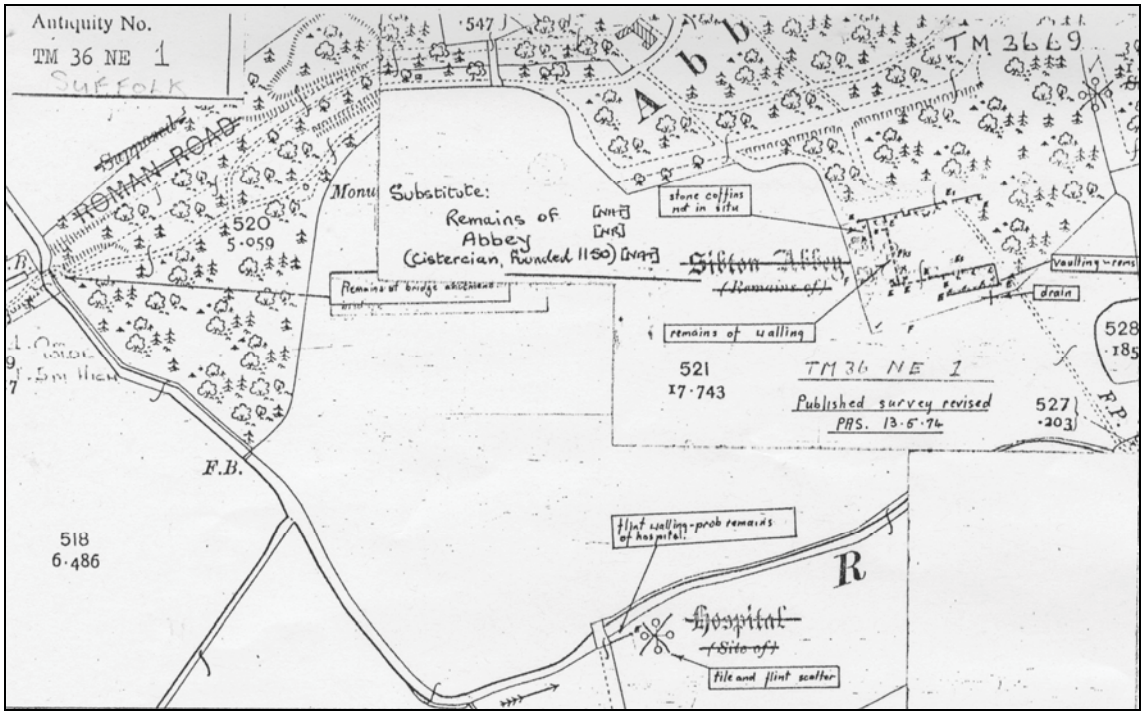


Figure 10. OS record card TM36 NE 1 showing note for medieval hospital site at the bottom of the card and identifying a bridge abutment on the left

7. Recommendations

Currently the limit of the scheduled area does not cover the bridge and causeway. This is an omission as they are clearly a physical, upstanding part of the monument and require protection. It is recommended that the area of the scheduling is increased along the line of the full length of the trackway to include them.

David Gill
August 2010

8. Bibliography and other sources

Drury, P., 1981, 'The production of brick and tile in medieval England', in Crossley, D.W. (ed.) Medieval Industry, pp.126-42. Counc. Brit. Archaeol. Res. Rep. 40, London.

Plates

Plate 1. The 18th century bridge to Sibton Abbey over the River Yox, from the east

Plate 2.
View from the west showing the collapsed parapet and wings. The slumped bank is shown in the foreground on the left prior to its removal.

Plate 3.
Commemorative keystone inscribed ‘JS 1770’. Note remains of a lime render on the surface of the bricks pre-dating the concrete screed.

Plate 4 and 5. The flint-built core of the medieval bridge abutment on the east side of the 18th century bridge. The remains of the brick facing can be seen next to the bottom of the ranging pole. The picture on the right shows the sloping side of the causeway aligned with the abutment edge.

Plate 6
The medieval bridge abutment projecting from the east side of the bridge looking from the north bank

Plates 7 and 8
Truncated south end of the west parapet and the detached parapet and bridge wing lying in the river. Note the absence of mortar on the base and between the joints of the 19th century frogged bricks at the base of the collapsed section. Photographed prior to the removal of the slumped bank.

Plate 9.
Section through the causeway showing the construction cut for C18th century bridge. The C18th abutment where the bridge is keyed into the bank is at the base of the section. The projecting wall on the left was added to the bridge in the 19th century when the parapet and wing were rebuilt after a previous collapse.

Plate 10 and 11.
Left: View of the remains of Sibton Abbey taken from the bridge. *Right:* General view of the north side of the river. The topography shows no indication of an approach to the medieval or former roadway.