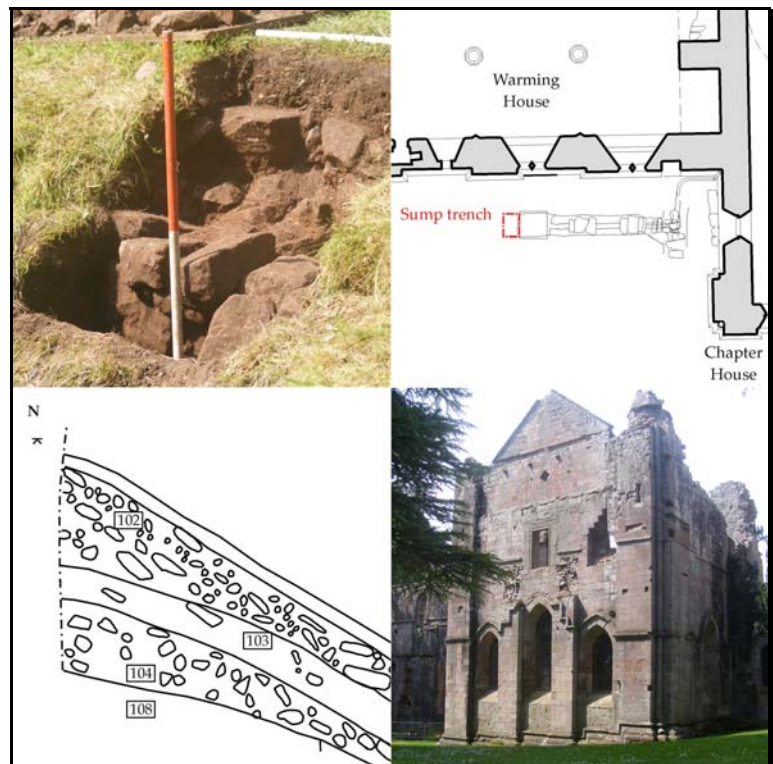


Historic Scotland
Properties in Care
Minor Archaeological Works 2008

Dryburgh Abbey:

Archaeological excavations and
standing building recording,
June 2008

HS PIC Index number: 90103
Project code: HSCO-90103-2008-02



1 September 2008
Kirkdale Archaeology

<u>Site</u>	Dryburgh Abbey
<u>N.G.R</u>	NT 591 316
<u>Project Description</u>	Archaeological excavation and standing building recording
<u>Project code</u>	HSCO-90103-2008-02

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SUMMARY

Further to larger scale excavations in 2006, minor excavations were carried out at Dryburgh Abbey as part of works to improve drainage near the East Range. An underground 'mole' was employed to dig a drain at a depth intended to avoid disturbing any significant archaeological deposits, running from the sump and soak-away just south of the Warming House and carrying excess water away to the ditch to the south of the Novices' Dayroom.

Three small trenches were excavated, one an extension of an earlier trench at the sump, and two situated on the north side of the ditch where the 'mole' was set to emerge. The sump trench did not reveal any new features beyond those seen in 2006, believed to relate to 'industrial' activity during the monastic period. Features revealed in the two ditch trenches were thought likely to be of post-monastic date, associated with late 18th- to early 19th-century landscaping.

During these excavations a standing building recording exercise was undertaken, examining the exterior north and east walls of the Chapter House. Evidence was seen suggesting the presence of timber structures, including what may have been a substantial timber gallery running around the upper east end of the Chapter House, possibly extending round to the north face of the Northeast Tower.

1.0 INTRODUCTION

Kirkdale Archaeology was asked to undertake minor archaeological excavations and standing building recording at Dryburgh Abbey in the Scottish Borders. This work was undertaken in response to long-term problems with drainage, which had been causing damp in the Chapter House in the East Range of the cloister, and was a continuation of work undertaken at the Abbey in 2006.

The Abbey was founded in the mid 12th century. A near continuous consistent base course can be seen running up the East Range, thought to be of later 12th-century date, making this range along with parts of the Abbey church the oldest identifiable structures on site. The Abbey is located in a bend in the River Tweed, with a ditch to the S of the buildings cutting off this loop. The ground drops to the S, apparently in a series of terraces, and the Chapter House sits across the drop between two of these terraces, evidently at least partially dug into the slope. The Chapter House projects c 7 m E of the line of the rest of the East Range, giving it the prominence that such an

important building deserves.

The 2006 excavations were on a relatively large scale, with the intention of digging a track to take a drain down the entire East Range to the Abbey ditch, stepping out around the E end of the Chapter House. A complicated sequence was observed, but little of it was excavated, with work concentrating on a pre-existing stone built drain that was discovered. This feature started on the N side of the Chapter House, close to its walls, and ran around this building, before turning to the S again on its S side. Surprisingly, this feature did not reach the Abbey ditch, stopping instead some 8 m S of the Chapter House in a fairly crude soak-away, not much deeper than the drain itself.

As this drain ran down the East Range it cut through numerous archaeological deposits, indicating that it was relatively late in the Abbey's sequence. At the S end, near the sump, one feature in particular stood out. This was a large but fairly shallow cut down into the subsoil, with only part of its N end observed. On the flat base of this feature, a deposit of slag and charcoal had been dumped, evidently while cold. Re-deposited natural was then found over this, filling the cut. A silty clay deposit rich in bone overlay this, and it is possible that this was a further fill, but later disturbance in the excavated area made this unclear. Along the E side of the ditch a further silty deposit was interpreted as part of the fill of a modern drain.

After the 2006 excavations, HS MCU personnel reinstated this drain, and enhanced the soak-away at its S end, by digging and then coring into the subsoil below. This work has proved insufficient, with water merely overflowing from the soak-away, meaning a pump has been required to carry the excess water to the ditch. Due to the extensive survival of archaeological deposits down the East Range, it was necessary to continue this drain without excessive amounts of disturbance. To this end Historic Scotland devised a scheme whereby a track was to be excavated by an underground 'mole', between the soak away and the ditch. This method required only a small extension of the original excavation to the S of the soak-away (Sump Trench) as well as two trenches within the ditch to characterise the deposits where it will emerge, (Trenches 1 and 2).

The work was undertaken on 4-6 June 2008.

2.0 EXCAVATION ACCOUNT

2.1 Sump Trench (Figs. 1& 4)

Below topsoil **F001** only some 80 mm thick, deposit **F006** was noted in the E section. This was a compact mid brown silty clay, containing some shell and bone; this only just clipped the E edge of the trench, and sat in a cut **F007** which was up to 250 mm deep, rising to the S. This was cut against **F002**, which had evidently covered the trench, although only the narrow strip down the W edge was excavated on this occasion. This was similar to **F006**, but was paler and had more inclusions - particularly animal bone, but also some shell and mortar - and was some 200 mm thick. Also, a small lead object and a single body shard of green glazed orange fabric pottery was recovered from **F002**.

Below **F002** was **F003**, a compacted deposit of reddish brown silty clay and rounded pebbles, with occasional charcoal flecks throughout. This was up to 400 mm thick and overlay **F004**, the 'industrial' deposit recorded in 2006. This only occurred at the N end of the trench, running for c 350 mm N-S as a substantial deposit, continuing as little more than a smear for a further 150 mm to the S of this. **F004** comprised a loose, root-affected deposit perhaps 30% slag and 70% dark grey-black very fine silt, rich in charcoal, mostly small diameter twigs but including some larger fragments. The slag was of all sizes up to 200 by 150 mm, and included fragments of what appeared to be furnace lining. This was up to 130 mm thick in the NE corner of the trench, and lay directly on the base of **F005**, the cut for **F003** and **F004**. No edges to **F005** were located in this trench, merely its flat base.

F005 was dug into **F008** a compact clean deposit of orange silty clay, containing occasional small rounded pebbles and very occasional charcoal flecks, as well as many roots. Below this was **F009**, a very compact mix of reddish brown silty clay and much stone - all rounded pebbles of all sizes up to 350 by 250 by 150 mm, at least 200 mm thick and not bottomed.

2.2 Trenches 1& 2 (Figs. 1, 2& 3)

2.2.1 Overview

These trenches were excavated in advance of a drain being cored underground c 2.10

m to the E of the Novices' Dayroom and the south part of the Warming House and emerging in the N slope of the ditch. Trench 1 was located where the core would break through into the ditch deposits. Trench 2 was excavated to investigate any structure there may be at the N edge of the feature. Trench 1 was 2.25 m below the N edge of the trench and extended a further 2.50 m to the S, it measured 1.00 m in width and a maximum of 1.05 m deep. Located at the top of the slope, Trench 2 measured 1.10 m N-S, 850 mm wide and was a maximum of 750 mm deep.

2.2.2 *Trench 1*

The uppermost deposit, **F101**, was loose chunks of turf and mid-dark brown clayey loam and measured an average of 60 mm in thickness. At the S end of the trench sealed by **F101**, **F106** was a possible E-W cut across the S end of the trench. Within **F106**, **F105** was a fairly compact mid brown sandy clay. It was difficult to distinguish between **F105** and **F103** to the N of it. Sealed by **F101**, **F102** was a deposit of stones with occasional red brown sandy clay patches. There were roughly 80% sub rounded stones measuring 80 mm by 60 mm on average. **F102** measured up to 500 mm in thickness at the N end of the trench but had tailed off before the S end. **F103**, sealed by **F102**, comprised fairly compact mid brown sandy clay with 15-20% sub angular stones measuring 60 mm by 40 mm on average and there were also occasional slate fragments. **F103** was seen in most of the trench and measured between 150 mm and 250 mm thick, thickening to the S. Directly below **F103**, **F104** was a compact deposit of stones and mid brown slightly sandy clay. There were 50%-60% stones measuring 80 mm by 60 mm on average (most of the stones are sub angular but there are also some sub rounded) and occasional mortar flecks and slate fragments. At the limit of excavation in the N part of the trench, **F108** comprised fairly compact of orange brown slightly silty clay with occasional sub rounded stones. To the S of **F108**, **F107** was fairly compact red/light brown sandy clay and stones. Approximately 30% sub rounded stones measuring 60 mm in diameter on average. These deposits, and all the others above, have suffered moderate to heavy rooting.

2.2.3 *Trench 2*

The upper deposit, **F201**, was turf and fairly loose mid-dark brown clayey topsoil.

F201 was only bottomed over the structural remnants in the S end of the trench, up to 350 mm in depth was removed. In the S end of the trench **F202** was a single rectangular sandstone block, measuring 300 mm N-S, 250 mm E-W and 250 mm thick, that was roughly dressed, and was within **F201**. To the NW of **F202** but slightly S of the S edge wall line **F210**, **F203** comprised two rectangular sandstone blocks sitting fairly flat. Partly within the W baulk **F204** was a single sandstone block that tipped down slightly to the N. **F204** sat directly over wall line **F210**. In the NE corner of the trench **F209** was a N-S line of loose grey/brown silty clay that ran N from **F206** to **F207** at the edge of the trench. Toward the E side of the trench **F205** was a rectangular red sandstone block that measured at least 400 mm N-S (the N limit is not seen), 320 mm E-W and 260 mm thick. Most of the upper face of **F205** was flat but the W part sloped down to the edge, this stone was set within **F208**. At the E edge of the trench, immediately E of **F205**, **F206** was a rectangular red sandstone block measuring 240 mm N-S, 110 mm thick and over 100 mm E-W (the E side was outside the excavated area). It was noted that there was another block directly below the one on the surface and that both were roughly 50 mm S of the line of the revetment in the rest of the trench. The generic number for the S face of the wall that included **F205** and **F206** is **F210**. It was seen at the W section that there were at least two courses of **F210** and probing detected another one with no sign of the base. In the NW corner of the trench **F207** was a red sandstone block that sat flat 150 mm below the present ground surface. Continuing E from **F207/F211** was the S edge of a line of stones that only just extended into the trench. It is notable that **F207** was c 120 mm S of **F211**. Located between **F207/F211** and **F204/F205**, **F208** comprised small sub-rectangular chunks of sandstone and fairly clean orange/brown clay in a roughly even mix.

3.0 INTERPRETATION AND OBSERVATIONS

3.1 Sump Trench

This small excavation extended the known size of features already discovered in the 2006 excavation, without revealing any new archaeological deposits. The fill **F006** continued along the E edge of the trench in its cut **F007**. In 2006 this was interpreted

as the side of a recent field drain. This cut into the bone-rich deposit **F002**, which may well be the upper fill of cut **F005**, containing the 'industrial' deposit, but later features such as **F007** had destroyed or obscured this. A body shard of medieval pottery was recovered from **F002**, and it continued beyond the trench.

Cut **F005** also continued across the trench, with its very flat base, making it now at least 3.4 m N- S by 1 m wide, and at least 300 mm deep (450 mm if **F002** is an upper fill). At least N- S the full extent of 'industrial' deposit **F004** was revealed as 1.7 m. As noted in 2006 this appears to have been placed in cold, with no sign of heat damage to surrounding deposits. This makes it unlikely that **F005** is itself any kind of industrial feature; rather it seems to have been used to dump this material in. The discrete nature of the deposit, along with the presence of small diameter charcoal and fragments of probable furnace lining, indicate that it has not travelled far. Above this was **F003**, which appears to be re- deposited natural- remarkably similar in composition to **F009** some 350 mm below it. **F003** seems to have been used to infill and level off the top of cut **F005**, continuing outside the trench with it.

Both of the lowest two layers are thought to be naturally derived fluvo-glacial deposits. The upper, **F008** was clean sand (the occasional minute charcoal flecks being explained by the roots that ran through it), while the lower, **F009**, was a mix of gravel and clay.

3.2 Trench 1

3.2.1 Phase 1

Exposed, but not excavated, deposits **F107** and **F108** appeared to be re-deposited subsoil. Neither **F107** nor **F108** were excavated within Trench 1 although a heavily diseased bone was recovered from **F108**. The bone was a long bone and it was not even possible to say, from the cursory examination of it during excavation, whether it was an animal or human bone.

3.2.2 Phase 2

Deposit **F104** was a mix of stones and brown clay; many of the stones were sub-angular. The mortar flecks and slate fragments also suggested that this may have been demolition or construction. The fairly small stones and small amounts of other

material would seem to suggest that construction waste was the more likely supply of this material, but extensive robbing may also have only left this sort of waste. This deposit was thicker at the N baulk, tailing off to the S, showing once again that this phase made the slope steeper than it had been immediately prior to its deposition. The finds from this deposit included white earthenware sherds and a clay pipe fragment; they are thought to be no earlier than mid 18th century.

3.2.3 *Phase 3*

Brown sandy clay **F103** may have been buried topsoil that was the base of N slope before **F102** was deposited. This would clearly not be the original base of the ditch as the phase 1 and 2 deposits were sealed by it. The finds from this deposit included white earthenware sherds suggesting 19th-century date, or perhaps gradual infill during the 19th century. There were occasional slate fragments within this but no real evidence of demolition.

3.2.2 *Phase 4*

F102 was an infill deposit of rounded stones and occasional clay patches that may have been re-deposited subsoil, and certainly did not look like construction waste. **F102** thinned as it continued down the hill and it has formed the shape of the current ditch. This deposit has heightened the N side of the ditch and given a much steeper slope down to the base.

3.2.1 *Phase 5*

The turf and topsoil, **F101**, was contaminated with recent material including flower bulbs planted this year, which were throughout it. **F106** was a possible cut that was only vaguely seen within the trench but it is also possible that the soil looked different as the bottom part of the ditch is sometimes waterlogged. A fair distance to the W of the trench, immediately E of the central bridge over the ditch, is a manhole over a concrete service box. In the W side of the service box a ceramic pipe appears to head in this direction. Looking into the manhole the water level was roughly 1m below the bottom of the ditch and appeared to continue down a fair way. It may be that **F106** was a cut through the ditch fill for a pipe associated with the pipe seen in the manhole. The alternative is that **F105** was a discoloured area of **F103**.

3.3 Trench 2

3.3.1 Phase 1

F205 was a rectangular red sandstone block forming part of the S face of the wall; it extended 400 mm S from the face showing a fairly substantial structure. Immediately E of **F205**, **F206** was part of the same structure but the outer face is 50 mm S of that at **F205**. It was noted that there was another block under **F206** so it appeared that either a section of wall had slipped forward (S) or there was a change in build. The S face of the wall, **F210**, was seen and probed to be at least three courses high and was thought to continue below this. This was a substantial construction near the current N edge of the ditch. It is possible that **F207** was the S end of the stones at the N face of the wall and **F211** the continuation of that feature, although there is a slight difference in alignment between the two it is the N face that would be important. Between all the various pieces of walling **F208** appeared to be small stone and clay infill forming the core. The wall that was seen in Trench 2 most likely belongs in this phase, although there is no stratigraphical link between the two trenches. The wall appeared to have been formed with facing stones at the N and S sides and in-filled with clay and rubble between. The N side of the wall was close to the present ground surface, suggesting that there has been a fair bit of collapse to the S, where the remains are lower.

3.3.2 Phase 2

The turf and topsoil, **F201**, had been continually disturbed and contained occasional flower bulbs. This deposit was only bottomed over the structural remnants and it may be that it has built up over a fairly long period. **F209** appeared to be root disturbance or an animal burrow. **F202** was tumble from **F210**, probably fallen from over **F205**, the fact that it sat where it did showed the ditch to be filled to that point when it fell. **F202** appeared to be within **F201**, perhaps suggesting that there should be a division in that deposit above and below this stone. The two blocks at **F203** appear to have slipped forward (S) slightly and had topsoil, **F201**, below them at the N end. This seemed to suggest a gradual deterioration of the wall rather than deliberate demolition. At the W baulk, **F204** was another block that had slipped from the S wall face.

3.4 Summary (Trenches 1& 2)

Phase 1 is thought to date to shortly after or during the original cutting of the ditch. The fact that a bone was recovered from the deposits assigned this phase in Trench 1 suggests the latter but it may be this was trampled into the ground during the work. This phase is not represented in Trench 2. The suggestion is that the box seen to the E of the central bridge is constructed within the original feature and the drain was only about 2.00 m wide and straight sided, perhaps a stone built culvert. There would be a great difference in height from the ground level at the Abbey down to this but perhaps not as much as there is now as the top of the bank seems to have been made up slightly. There could have been a fairly steep natural slope and the drain was cut at the bottom of it. It is odd that there would also have been quite a slope down from the S to the ditch as well but it may be that this area has also seen 18th/19th century landscaping, raising and flattening the ground level to provide a good viewing area over the river.

In **Phase 2** the N bank was raised with infill, it may be that there was construction happening nearby at the time and the finds suggest that this phase is no earlier than mid 18th century. A possibility is that during this phase there was a wall constructed at the N edge of what is now the ditch and the slope was landscaped down from this. There may also have been construction immediately N of the wall. Further excavation would certainly help check this interpretation, and perhaps the relationship between the phase 1, 2, and 3 deposits seen in Trench 1. How far down does the S wall face go? And is there a N face? Although there was no evidence of this in the current trench there is a possibility that this wall could also have been the back (S) wall of a structure constructed on the edge of the ditch. It is also possible that the only the S edge is faced and there is revetting behind this, as the N face was not seen.

Phase 3 sees a period of disuse with a build up of topsoil over the phase 2 deposits; this is thought most likely to have dated to the 19th century.

Phase 4 saw an infill deposit of rounded stones and occasional clay patches that may have been re-deposited subsoil, and certainly did not look like construction waste. It thinned as it continued down the hill and it has formed the shape of the current

ditch. This deposit has heightened the N side of the ditch and given a much steeper slope down to the base. The tumble from Trench 2 has been tentatively placed in this phase - it may be that this phase saw the partial demolition of the phase 3 structure as part of the landscaping.

Phase 5 includes the topsoil from both trenches although some of it, particularly in Trench 2, may have been deposited earlier. The features in this phase have been continually disturbed up to the present day. A possible cut is also thought to be a late 20th-century feature.

4.0 CHAPTER HOUSE – STANDING BUILDING RECORDING

4.1 Overview

While undertaking small-scale excavations at Dryburgh Abbey, the opportunity was taken to carry out a brief survey of the upstanding remains of the E and N exterior walls of the Chapter House at the Abbey. A series of alterations to these sides seem to represent the remains of a timber gallery, and this work was undertaken with the aim of elucidating the function of these.

The Chapter House appears as a substantial building built into the East Range of the Cloister, although unlike any other building in the East Range apart from the Abbey Church it projects 7 m E of the line of the East Range. An identical moulding runs up almost the entire extent of the East Range, including the Chapter House, this is thought to be of later 12th-century date, making these some of the oldest known buildings on this site. The whole Abbey complex lies across ground that slopes down to the S, seemingly in a series of three terraces. The Chapter House sits across the break in slope of two of these terraces, such that its N side is quarried into the slope, while to the S it is at ground level.

Like much of the Abbey ruins it has been built using generally rectangular red or purple sandstone blocks, often with traces of fine tool marks over them. It is generally of well-coursed masonry, often with fine detail in the windows and mouldings.

A sketch drawing was made of the E and N faces, numbers were allocated to

features in the masonry, and added to this drawing (Figs. 5, 6& 7). A photographic survey of both these faces was also undertaken.

4.2 Description

4.2.1 *East wall*

The E face runs across the drop in slope, with a significant fall across this side, from N- S. The base course mouldings (**CH.008**), which run up almost the entire of this range, reflect this drop, indicating that it was built to be seen much as it is today.

Two square towers project slightly from the NE (**CH.002**) and SE (**CH.006**) corners, with roll mouldings running almost their entire height in the corner furthest from the main body of the Chapter House. Both these towers appear on the E face, while only the NE tower intrudes on the N face. Both carry a single narrow horizontal window on their E face, and although now damaged in their upper parts seem to have been capped by a polygonal stone roof.

The masonry of the E face between these towers has three lancet windows at its lowest level, with the central one (**CH.010**) larger than the other two (**CH.009** to the N, **CH.011** to the S). Small square pillars project slightly either side of the central window, **CH.004** to the N and **CH.005** to the S, dividing it into three bays. Although these pillars are now truncated, they only ever reached perhaps half the height of the wall. A wash course (**CH.012**) runs right across both towers and the connecting wall just above these windows, rising to clear the tops of all three windows.

Above the height of this wash course a further horizontal wash course runs across this side, although discontinuously, numbered **CH.013- CH.016** from N to S. Above the central lancet window **CH.010** is a rectangular window **CH.029**, this appears to be inserted (by **CH.030**), but it is unclear if this cuts through the wash course or if it already stopped here. To the N of this a further, rather enigmatic, aperture (**CH.031**) interrupts the wash course; this is perhaps best interpreted as an inserted aperture, blocked off and now partially re- opened. A further gap in the S end of the wash course is likely to be an alteration.

Above the rectangular window **CH.029** the wall steps back slightly to the W along a horizontal chamfered strip (**CH.017**). A quatrefoil window (**CH.019**) central to the

masonry above **CH.017**, numbered **CH.018**, seems to be original.

The top of **CH.018** is marked by a slightly recessed strip **CH.037**, the height of a single course of stonework and running the length of the wall, likely to have been inserted. Above this is the triangular gable (**CH.020**), capped by flagstones (**CH.021** to the N and **CH.022** to the S).

Apart from the rectangular window **CH.029**, the aperture to its N **CH.031** and the recessed strip **CH.037**, all the features listed above seem original to the Chapter House. **CH.029** is shown to be inserted by its surrounding masonry, **CH.030**, which interrupts the courses of the main wall build **CH.001**, and is made of small, irregularly shaped sandstone chunks. Internally (the W side of the wall) this can also be seen to be inserted, and the scar from a pitched roof can be seen to post- date it.

The aperture to the N of **CH.029**, **CH.031** is very hard to interpret. Vertical strips of masonry have been inserted to both N (**CH.033**) and S (**CH.032**) to create a straight edged aperture, although both now seem damaged. It is unclear if **CH.031** functioned as a door or a window. A significant crack runs up from the top of **CH.031** to the wall head.

The recessed strip of stonework **CH.037** is so far above the ground that detailed examination is impossible. It is thought to be an alteration, with a series of four corbels just below it (numbered **CH.038- CH.041** N to S) also believed to be inserted into masonry **CH.018**. Two vertical horizontal dooks (**CH.042** and **CH.043**) just below these corbels sit either side of the quatrefoil window **CH.019**, and are also cut into **CH.018**. A similar dook **CH.045** is cut in below these, on the S side of **CH.029**, with a possible in filled one **CH.044** on its N side. A vertical slot **CH.048** has been cut into wash course **CH.015**, again to the S of **CH.029**.

Below **CH.029** is a complex sequence of alterations, likely to be related to each other. A series of five shallow but large holes have been cut in a horizontal line across this face, numbered **CH.049- CH.053** from N- S. Just above the height of these the two pillars have been cut back to be flush with the wall face (**CH.004** by **CH.034** and **CH.005** by **CH.035**). The highest point of wash course **CH.012** has also been clawed back (**CH.036**), just above the central lancet window **CH.010**. A water spout **CH.054**

protrudes from the wall just above the lancet window to the N (**CH.009**), and a narrow slot **CH.055** has been cut through **CH.012** just to the N of **CH.054**, within the area of NE tower **CH.002**.

At the base of the wall, below **CH.012** was a series of less coherent holes. Two large voids have been created in the stonework of tower **CH.002**, at its N (**CH.059**) and S (**CH.060**) edges, with that to the N continuing round to the N face. A small slot **CH.057** has been cut into the S side of window **CH.009**, and two further small holes (**CH.056** and **CH.058** were recorded cut into pillar **CH.004**.

The final area of alteration to this facade of the Chapter House involves the upper part of the NE tower **CH.002**. Just above the upper wash course **CH.013** a large but shallow rectangular cut **CH.046** has been made, with a small square one **CH.047** just to its N. To the N of these, right on the corner between E and N faces, and running round onto the N face is a sequence of slots cut into the fabric of **CH.002**. At the top is **CH.061** a horizontal rectangular hole, separated by some distance from a series of three similar seemingly evenly spaced cuts, numbered **CH.062- CH.064** from top to bottom. **CH.064** sits just above wash course **CH.013**, and a very narrow but long deeply cut groove **CH.065** runs down from this, again also appearing on the N face.

4.2.2 *North wall*

Unlike the E the N side sits across level ground. The NE tower (**CH.002** on the E face, **CH.067** on this side) occupies its E end, with masonry **CH.066** running W from this back to the main body of the E range. A single lancet window **CH.071** is central (horizontally) to **CH.066**. The same mouldings run round from the E face, numbered here **CH.068** at the base, **CH.069** for the wash course over the window, and **CH.070** for the uppermost wash course. A series of three stone corbels (**CH.072- CH.074** E to W) survive at the top of the E end of **CH.066**.

Most of the alterations noted on this side are found on the NE tower, and many of these are reflected in both the N and E face. At the bottom is **CH.059**, while above the upper wash course **CH.070** is the same sequence as noted on the E gable of four large holes **CH.061- CH.064** from top to bottom, with the same long, shallow but well cut vertical groove **CH.065** leading down from **CH.064**. The wash course

CH.070 has been trimmed back between **CH.064** and **CH.065** (numbered **CH.078**) over a substantial part of its length across the face of the tower. At the W end of **CH.065** is a unique feature, an apparent horizontal cut into the wall, mostly in filled by **CH.077**, to make it flush with the wall. Long thin horizontal projecting slabs have been added to top and bottom of **CH.077**. **CH.075** at the top runs the length of **CH.077** and projects only slightly, while **CH.076** at the bottom projects further, but is only found at the W end of **CH.077**.

Still within **CH.067**, the N face of the NE tower is **CH.079**, a long horizontal cut between wash courses **CH.069** and **CH.070**. There are two breaks in **CH.069** below **CH.079**, **CH.081** to the W being small and probably accidental, while **CH.082** is a larger cut that seems deliberate. At the base of the tower is a further area of damage, **CH.086** that has removed part of the base course moulding **CH.068**. This seems irregular enough that it has probably been caused accidentally.

Away from the NE tower three fairly large, but very shallow holes were noted at the W end of **CH.066**, numbered **CH.080**, **CH.084** and **CH.085** from top to bottom. The final alteration recorded is **CH.083**, the cutting back of part of wash course **CH.069**, just above and to the W of window **CH.071**.

4.3 Discussion

Although by no means can every alteration be explained, a large number on the E gable of the Chapter House seem to relate to a timber structure built off this end. There are two major areas in particular that seem to be connected to this, an upper area relating to its roof, and a lower one to its floor.

At the top of the E wall, although so high up that features are hard to examine, is the recessed strip **CH.037**, and just below this the four corbels **CH.038- CH.041**. These seem likely to relate to a timber roof, presumably pitched down to the E. The corbels could have carried a roof beam which fitted into the recessed strip above. The four small dooks below this, **CH.042- CH.045**, may have helped carry this roof.

The most serious area of alteration is found just above the lancet windows **CH.009- CH.011**. The series of five holes running in a horizontal line above this face (**CH.049- CH.053**) are thought to have carried timbers providing the floor beams. All the

projecting stonework above these and below the middle wash course has been cut back to be flush with the rest of the face. This means that the two pillars **CH.004** (cut back by **CH.034**) and **CH.005** (**CH.035**), as well as the highest point of wash course **CH.012** (by **CH.036**) have all been reduced. Not only does this demonstrate the use of this space, it also shows that this is indeed an alteration to the original appearance of the Chapter House. Although the overall size of this hypothetical timber gallery remains unknown, there is a considerable difference in height between the presumed floor and rooflines. No good evidence for a second floor was noted, so if a pitched roofline is projected onto this it seems possible that a fairly wide (or simply tall) gallery was constructed.

At present there is no solid evidence for how access to this gallery was achieved. The central upper aperture **CH.029** is clearly inserted, and functions as a window. No relationships between it and the features relating to the gallery were observed, a window looking into the gallery seems unlikely, so it seems likely that it either pre or postdates it. It is of course possible, but cannot be proved, that **CH.029** was once a door and has been converted into a window.

The aperture **CH.031**, to the N of **CH.029**, is very hard to understand. Inserted masonry on the N (**CH.033**) and S (**CH.032**) sides of **CH.031** form right angles leading in to the wall, and define this feature. These seem partly obscured, and it is likely that **CH.031** was filled in, and has since been partially re opened. It is perfectly possible that **CH.031** was constructed as a door leading out to the gallery.

The final major area of alteration on this side, and actually running round to the N face is found on the NE tower **CH.002**. Apart from two slots (**CH.049** and **CH.050**) relating to the probable floor level described above, none of the features on **CH.002** relate to alterations elsewhere in terms of height. There are two sets of two slots cut into **CH.002** near the top (**CH.046** and **CH.047**) and bottom (**CH.059** and **CH.060**) of the tower. Some of the deepest recesses cut anywhere into the Chapter House are found right on the corner of **CH.002**, near its top. **CH.061** is highest, and sits on its own, below this are three further deep holes, **CH.062**- **CH.064**, relatively regularly spaced. The deeply cut long but narrow slot **CH.065** runs down the corner from **CH.064**, although it is of course impossible to be certain if they are contemporary, or

if one cuts the other.

On the N face is a further unique feature, running W from **CH.063**. This is the filled in slot **CH.077**, with its long thin projecting slabs **CH.075** and **CH.076** inserted at its top and bottom respectively. Below this is a large cut through wash course **CH.070** (**CH.078**), with a smaller one (**CH.082**) cut into the lower wash course **CH.069**. A single long cut (**CH.079**) has been made in the face of the NE tower between **CH.069** and **CH.070**.

The interpretation of these features in the NE tower is problematic. They do not seem to relate well to the features thought to be to do with the timber gallery on the E gable, however their depth and positioning seem to indicate that something substantial was carried round from the E to the N face. Although they may relate to an entirely separate episode, economy of hypothesis suggests that this gallery was carried at least part way round onto the N face of the Chapter House. This may have only been on the N face of the NE tower, as there is minimal evidence for alteration to the W of this on this side. The three holes noted at the W end of this wall (**CH.080**, **CH.084** and **CH.085**) are so shallow and so far removed from the NE tower that they seem unlikely to be related, they may in fact represent accidental damage.

Although the fine details are often obscure it can be seen that it is very likely that a substantial timber gallery ran around the E end of the Chapter House, and quite possibly round to the N face of the NE tower. The holes for the floor in particular, while large are shallow, and it must be thought that the structure was either largely self-supporting, or was carried by some means from the ground below. Although excavation of the area to the E of the Chapter House was carried out by Kirkdale Archaeology in 2006, this was fairly superficial outside of the area of a drain that was excavated fully, and it is possible that evidence relating to this gallery remains to be found.

5.0 CONCLUSIONS

This excavation confirmed the location of monastic activity within the Sump Trench in the form of a clear landscaping exercise recycling industrial waste at a depth of c

500 mm. This episode may well relate to site preparation works for the development of the East Range during the 12th- and 13th-centuries.

Trenches 1 and 2 were located in the present monastic ditch at the S end of the East Range. The existing profile of the ditch is the result of the post monastic landscaping, most likely associated with the later 18th- to early 19th-century formal landscape. The ditch appears to have been infilled over the original monastic phase, although this was not clearly seen. It is however most likely that the N side of the monastic ditch is reflected by masonry **F210** and that the carefully contoured v-shaped profile represents infilling over a more vertically sided and deep channel. The depth of the monastic ditch could extend to meet the natural water table which lies *c* 2 m below the present ditch base. The Roy Military Survey of Scotland (1747-1755) shows the ditch still *in situ* with what appear to be several structures along its N side leading towards the E. The present topography of this area of the site suggests that all these structures have been cleared away and that the ditch has been landscaped into a more rustic feature associated with the ha-ha which runs N-S slightly further to the E.

It is possible that the monastic drain has been retained as a channel below the present ditch base and is somehow associated with a hatch – described as a well – located in the base of the present ditch close to the present access bridge. In other words, it is possible that the late 18th- to early 19th-century landscaping saw the introduction of some form of drainage channel or pipe within the monastic ditch and which was then sealed over to create the present layout.

The implications for the cutting of the new proposed drainage pipe were:

- The outlet will cut across the north wall of the monastic ditch
- The outlet will be above the present base of the landscaped ditch
- The material mostly affected within the ditch relates to post-monastic infill

It may be worth exploring the potential for recycling the 18th/19th-century drainage system for the ultimate removal of surface water.

Roy's plan (Plate 1) shows the settlement developed around the ruins of the abbey in the immediate post medieval period. It was granted the status of a burgh of barony by James V in 1527. The later 16th century saw the grounds of the abbey subdivided. A grant of 1581 describes these new properties within the monastic buildings. These included a new garden on the west of the precinct bounded by the ruinous walls of the abbey bakehouse and brewhouse and the mill lade. Other houses belonging to former canons of the monastery were also situated adjacent to the mill lade.



Plate 1 : Detail showing Dryburgh Abbey and associated village on General Roy's Military Survey of Scotland, surveyed 1747-55.

The Roy map shows this settlement to the west of the present abbey. The most southern part of this appears to be a street following the line of the mill lade, a convenient source of water. A further street runs N-S, possibly slightly to the west of

the present west range. The view of Dryburgh by Slezer (Plate 2) shows a house along the line of the lade, with further houses possibly shown in the background.

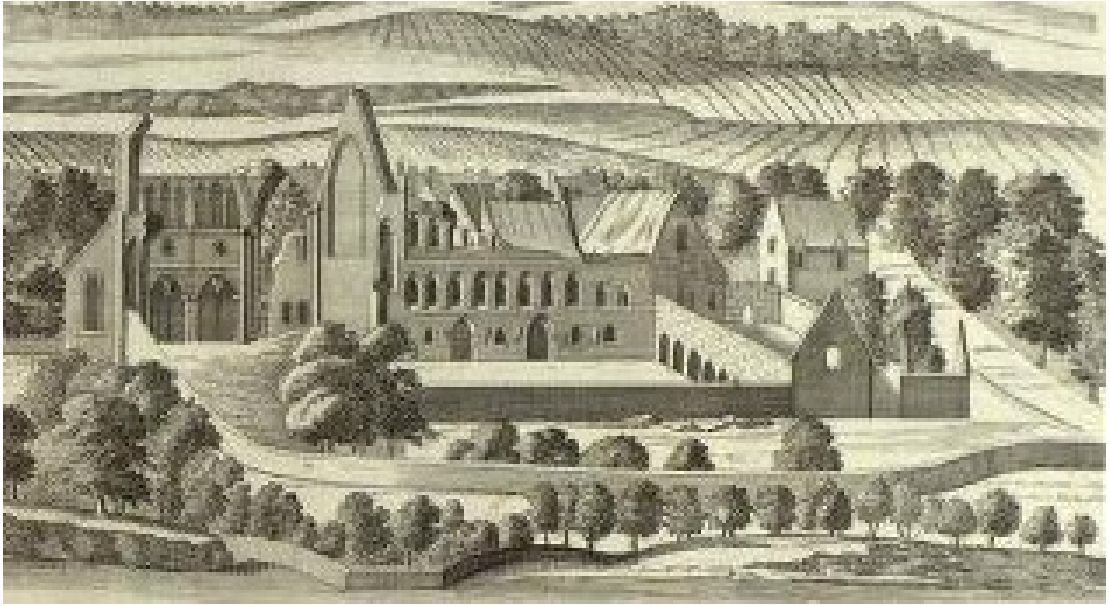


Plate 2 : Detail of Dryburgh Abbey by Slezer, 1693

Note the house with two dormers standing to the right of the main abbey buildings. The settlement was removed in the later 18th century during the extensive landscaping of the site by David Erskine, who created the romantic landscape that we see today.

Sump trench

001	Topsoil
002	Bone rich mid brown silty clay
003	Re- deposited natural, below F002
004	'Industrial' deposit
005	Cut for F003 and F004
006	Brown silt fill along E edge of trench
007	Cut for F006
008	Clean sand (upper natural)
009	Sand and gravel (lower natural)

Trench 1

101	Turf and topsoil.
102	Rounded stones and brown sandy clay.
103	Mid brown sandy clay.
104	Mix of stones and sandy clay.
105	Fill of 105.
106	Possible cut at the S end of the trench.
107	Red/light brown sandy clay and stones at the limit of excavation. Sandy clay and stones at the limit of excavation.
108	Orange/brown silty clay seen at the limit of excavation.
201	Turf and topsoil.
202	Tumbled block S of 210.
203	Two slipped blocks over middle part of 210.
204	Tumbled block at W side of the trench.
205	In situ block of the S face.
206	In situ block of the S face, E of 205.
207	Sandstone block in NW corner of the trench, S edge of N face of wall..

208	Small stones and clay, wall core.
209	Animal/root disturbance.
210	S face of wall.
211	E continuation of 207.

Chapter House – Standing building recording

CH.001	Main E wall build of Chapter House
CH.002	NE tower
CH.003	Roll moulding down CH.002
CH.004	N pillar
CH.005	S pillar
CH.006	SE tower
CH.007	Roll moulding down CH.006
CH.008	Footings below CH.001- CH.007
CH.009	N lancet window
CH.010	Middle lancet window
CH.011	S lancet window
CH.012	Moulding above CH.009- CH.011
CH.013	Upper horizontal moulding on CH.002
CH.014	Upper horizontal moulding above CH.004
CH.015	Upper horizontal moulding above CH.005
CH.016	Upper horizontal moulding on CH.006
CH.017	Chamfered course separating CH.001 from CH.018
CH.018	Middle area of masonry
CH.019	Quatrefoil window in CH.018
CH.020	Top part of wall- triangular gable
CH.021	Capping on N side of CH.020
CH.022	Capping on S side of CH.020
CH.023	Window in CH.002
CH.024	Window in CH.006
CH.025	Remains of string course at top of CH.002
CH.026	Remains of string course at top of CH.006
CH.027	Upper masonry of tower CH.002
CH.028	Upper masonry of tower CH.006
CH.029	Window between CH.010 and CH.019

CH.030	Inserted masonry around CH.029
CH.031	Aperture at same height as, but to N of CH.029
CH.032	Inserted masonry around S side of CH.031
CH.033	Inserted (?) masonry around N side of CH.031
CH.034	Cut into top of CH.004
CH.035	Cut into top of CH.005
CH.036	Cut into top of CH.012
CH.037	Recessed strip of masonry separating CH.018 and CH.020
CH.038	Inserted (?) corbel below CH.037 at N end of wall
CH.039	Inserted (?) corbel below CH.037 to S of CH.038
CH.040	Inserted (?) corbel below CH.037 to S of CH.039
CH.041	Inserted (?) corbel below CH.037 to S of CH.040
CH.042	Rectangular horizontal dook to N of CH.019
CH.043	Rectangular horizontal dook to S of CH.019
CH.044	Possible blocked dook to N of CH.029
CH.045	Rectangular vertical dook to S of CH.029
CH.046	Large shallow horizontal rectangular hole just above CH.013
CH.047	Small square dook to N of CH.046
CH.048	Cut (accidental?) in CH.015
CH.049	Rectangular vertical cut in CH.002
CH.050	Square cut in CH.002 to S of CH.049
CH.051	Possible filled in cut in CH.001, to S of CH.050
CH.052	Filled in square cut in CH.001, to S of CH.051
CH.053	Square cut in CH.006, to S of CH.052
CH.054	Water spout above CH.009
CH.055	Cut (accidental?) in N end of CH.012
CH.056	Vertical rectangular dook in CH.004
CH.057	Vertical rectangular dook in S side of CH.009
CH.058	Horizontal rectangular dook in N side of CH.004
CH.059	Vertical rectangular cut on N side of CH.002
CH.060	Large vertical rectangular cut on S side of CH.002
CH.061	Large horizontal rectangular hole (single stone) on N edge of CH.002- runs round to N face of Chapter House.
CH.062	Large horizontal rectangular hole (single stone) on N edge of CH.002- runs round to N face of Chapter House
CH.063	Large horizontal rectangular hole (single stone) on N edge of CH.002- runs round to N face of Chapter House
CH.064	Large vertical rectangular hole (single stone) on N edge of CH.002- runs

	round to N face of Chapter House
CH.065	Long narrow vertical cut on N edge of CH.002, running down from CH.064- runs round to N face of Chapter House
CH.066	Main wall build of N Façade
CH.067	NE corner tower (N face of CH.002)
CH.068	Wall footings below CH.066
CH.069	Middle wash course, same as CH.012 on the E face
CH.070	Upper wash course, same as CH.013 on the E face
CH.071	Lancet window
CH.072	Corbel at E end of wall head
CH.073	Corbel to W of CH.072
CH.074	Corbel to W of CH.073
CH.075	Slightly projecting long slab (part of CH.077)
CH.076	Lower projecting slab (part of CH.077)
CH.077	Filled in rectangular horizontal slab, runs W from CH.063
CH.078	Clawed back area of CH.070
CH.079	Long horizontal rectangular slot in CH.067
CH.080	Shallow horizontal rectangular slot (single stone) towards W end of CH.066, accidental?
CH.081	Damage (accidental?) to E end of CH.069
CH.082	Clawed back area of CH.069
CH.083	Clawed back/ damaged area of CH.069
CH.084	Shallow horizontal rectangular slot in CH.066 (single stone), accidental?
CH.085	Shallow vertical rectangular slot in CH.066, accidental?
CH.086	Damaged area of E end of CH.068, accidental?

A3.0

APPENDIX 3: LIST OF DRAWINGS

No	Type	Trench	Description	Scale	Date
1	Plan	1+2	Location of ditch trenches 1 and 2.	1:100	05/06/08
2	Plan	1	Post excavation plan.	1:20	05/06/08
3	Section	Sump	W facing section.	1:10	05/06/08
4	Section	Sump	E facing section.	1:10	06/06/08
5	Section	1	W facing section	1:20	06/06/08
6	Plan	Sump	Trench location.	1:100	06/06/08

No	Type	Trench	Description	Scale	Date
7	Plan	2	Post excavation plan.	1:20	06/06/08
8	Section	2	E facing section	1:10	06/06/08

A4.0

APPENDIX 4: LIST OF FINDS

Box-Bag	Material(s)	Quantity	Ctxt Nos.	Smpl no(s)
1248-001	Bone.	36	002	
1248-002	Window lead	1	002	
1248-003	Green glaze pottery	1	002	
1248-004	Lump of mortar	1	002	
1248-005	Degraded bone (poss. human femur) or possibly horn.	1	107	
1248-006	Bone	1	102	
1248-007	Plant pot	1	102	
1248-008	Square section iron nail	1	102	
1248-009	Brick/tile fragment	1	102	
1248-010	Green glaze pottery	1	102	
1248-011	Window glass with patina	2	102	
1248-012	Roof slate	1	103	
1248-013	Bone	3	103	
1248-014	White and blue patterned china	10	103	
1248-015	Iron nail	1	103	
1248-016	Vessel glass	1	103	
1248-017	Green glaze pottery	1	103	
1248-018	Clay pipe stem	1	103	
1248-019	Slag	Bag 1 of 3	005	
1248-020	Slag	Bag 2 of 3	005	
1248-021	Slag	Bag 3 of 3	005	
1248-022	Furnace lining	1 bag	005	
1248-023	Sample – industrial deposit	Bag 1 of 2	005	1
1248-024	Sample – industrial deposit	Bag 2 of 2	005	1

#	Description	From	Date
1	Sump trench industrial deposit F004	S	03/06/08
2	Sump trench industrial deposit F004	S	03/06/08
3	Sump trench industrial deposit F004	S	03/06/08
4	Ditch trench 1, detail of whole trench	SE	03/06/08
5	Ditch trench 1, detail of N end	SE	03/06/08
6	Ditch trench 1, detail of S end	SE	03/06/08
7	Sump trench cut F005 emptied	N	03/06/08
8	Sump trench cut F005 emptied	S	03/06/08
9	Ditch trench 1 finished, SW facing section	SW	04/06/08
10	Ditch trench 1 finished, SW facing section, detail of N end	SW	04/06/08
11	Ditch trench 1 finished, SW facing section, detail of S end	SW	04/06/08
12	Ditch trench 1 finished, SW facing section	SE	04/06/08
13	Ditch trench 1 finished, SW facing section	NW	04/06/08
14	Ditch trench 1 finished, SW facing section, detail of SE end	NW	04/06/08
15	Sump trench as finished	W	04/06/08
16	Sump trench as finished, E facing section	E	04/06/08
17	Sump trench as finished, N facing section	N	04/06/08
18	Sump trench as finished, W facing section	W	04/06/08
19	Sump trench as finished, detail of F004 in E facing section	E	04/06/08
20	Sump trench as finished, detail of F004 in W facing section	W	04/06/08
21	E gable of Chapter House	E	04/06/08
22	E gable of Chapter House	E	04/06/08
23	E gable of Chapter House	E	04/06/08
24	E gable of Chapter House	E	04/06/08
25	E gable of Chapter House	E	04/06/08
26	E gable of Chapter House	E	04/06/08
27	E gable of Chapter House	E	04/06/08
28	E gable of Chapter House	E	04/06/08
29	Details of E gable of Chapter House	E	04/06/08
30	Details of E gable of Chapter House	E	04/06/08
31	Details of E gable of Chapter House	E	04/06/08
32	Details of E gable of Chapter House	E	04/06/08
33	Details of E gable of Chapter House	E	04/06/08
34	Details of E gable of Chapter House	E	04/06/08

#	Description	From	Date
35	Details of E gable of Chapter House	E	04/06/08
36	Details of E gable of Chapter House	E	04/06/08
37	Details of E gable of Chapter House	E	04/06/08
38	Details of E gable of Chapter House	E	04/06/08
39	Details of E gable of Chapter House	E	04/06/08
40	Details of E gable of Chapter House	E	04/06/08
41	Details of E gable of Chapter House	E	04/06/08
42	Details of E gable of Chapter House	E	04/06/08
43	Details of E gable of Chapter House	E	04/06/08
44	Details of E gable of Chapter House	E	04/06/08
45	E gable of Chapter House	SE	05/06/08
46	E gable of Chapter House	E	05/06/08
47	E gable of Chapter House	NE	05/06/08
48	E gable of Chapter House, W side	W	05/06/08
49	E gable of Chapter House, W side, details top- bottom, N- S	W	05/06/08
50	E gable of Chapter House, W side, details top- bottom, N- S	W	05/06/08
51	E gable of Chapter House, W side, details top- bottom, N- S	W	05/06/08
52	E gable of Chapter House, W side, details top- bottom, N- S	W	05/06/08
53	E gable of Chapter House, W side, details top- bottom, N- S	W	05/06/08
54	E gable of Chapter House, W side, detail of central window at base	W	05/06/08
55	Sump trench from above	-	05/06/08
56	E gable of Chapter House, W side ground floor, general	W	05/06/08
57	E gable of Chapter House, W side ground floor, details top- bottom, N- S	W	05/06/08
58	E gable of Chapter House, W side ground floor, details top- bottom, N- S	W	05/06/08
59	E gable of Chapter House, W side ground floor, details top- bottom, N- S	W	05/06/08
60	E gable of Chapter House, W side ground floor, details top- bottom, N- S	W	05/06/08
61	E gable of Chapter House, W side ground floor, details top- bottom, N- S	W	05/06/08
62	Ditch trench 2 as finished	S	05/06/08
63	Ditch trench 2 as finished	SW	05/06/08
64	Ditch trenches 1 and 2 as finished	SE	05/06/08

#	Description	From	Date
65	Ditch trench 2 as finished	S	05/06/08
66	Ditch trench 2 as finished	SE	05/06/08
67	General shots of upstanding ditch revetment walls, to W of bridge	-	05/06/08
68	General shots of upstanding ditch revetment walls, to W of bridge	-	05/06/08
69	General shots of upstanding ditch revetment walls, to W of bridge	-	05/06/08
70	General shots of upstanding ditch revetment walls, to W of bridge	-	05/06/08
71	General shots of upstanding ditch revetment walls, to W of bridge	-	05/06/08
72	Chapter House, NE corner	NE	06/06/08
73	Chapter House, NE corner, detail of slots cut into corner	NE	06/06/08
74	Chapter House N wall, base	N	06/06/08
75	Chapter House N wall, top	N	06/06/08
76	Chapter House N wall, top of NE tower	N	06/06/08
77	Chapter House NE corner, detail of slots in corner	N	06/06/08
78	Chapter House N wall, E end	N	06/06/08
79	Chapter House N wall, W side of window	NW	06/06/08
80	Chapter House N wall, corbels at E end	NW	06/06/08
81	Chapter House N wall, protruding stones at E end	NW	06/06/08
82	Chapter House N wall, detail of E corbel	NW	06/06/08
83	Chapter House N wall, slots cut into NE corner	NW	06/06/08
84	Chapter House N wall, detail of E corbel	E	06/06/08
85	Chapter House E gable, aperture at N end	E	06/06/08
86	Chapter House E gable, upper window	E	06/06/08

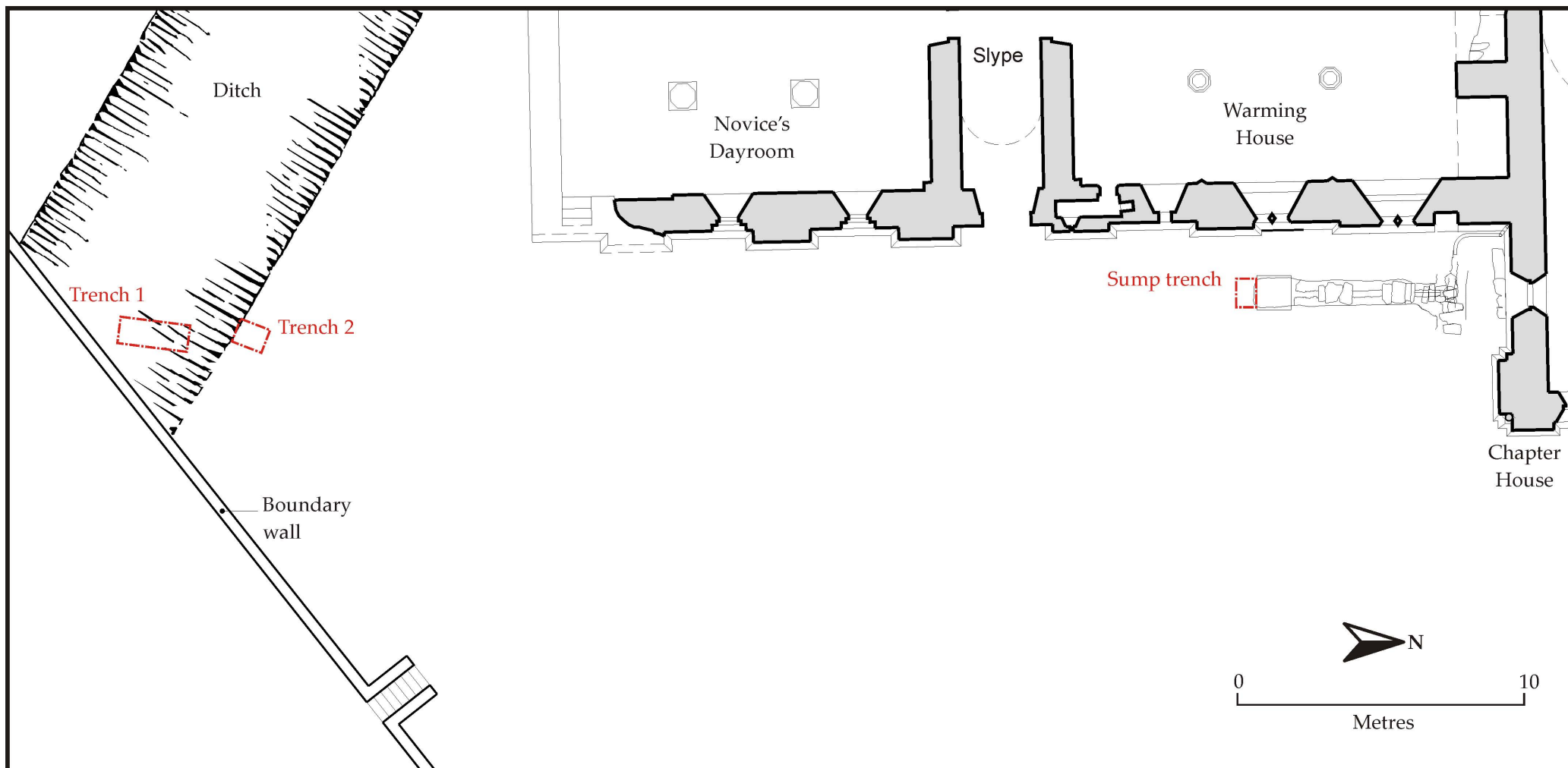
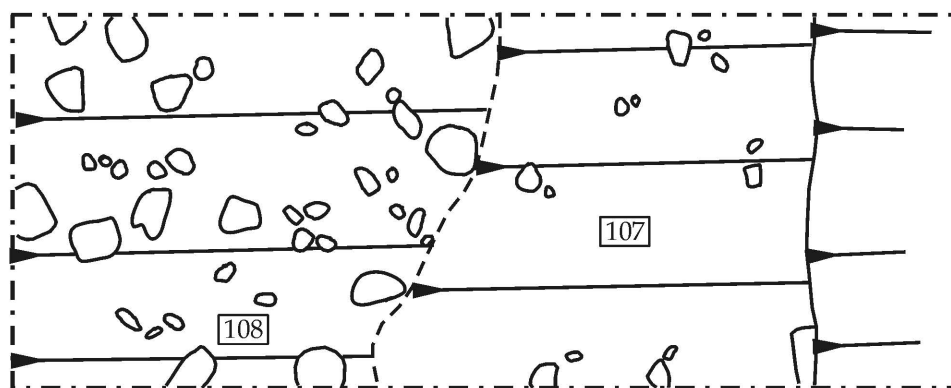
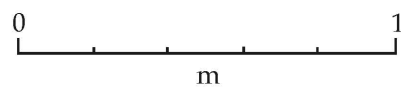
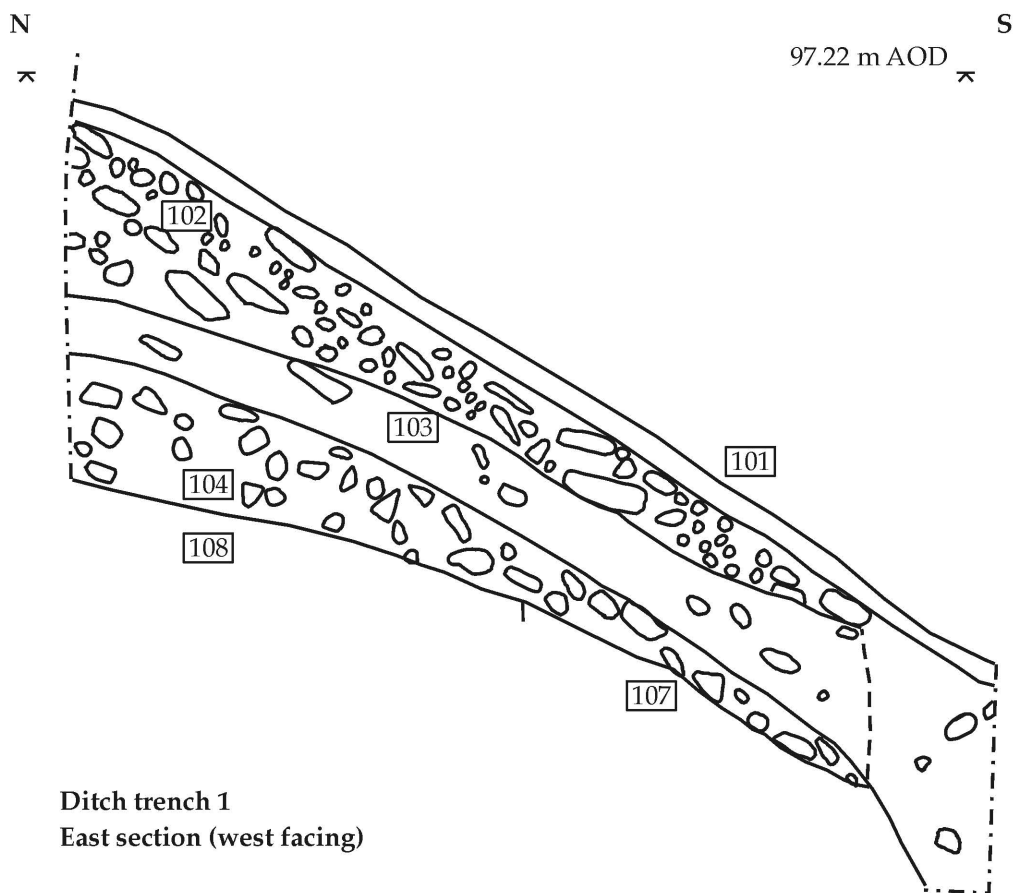
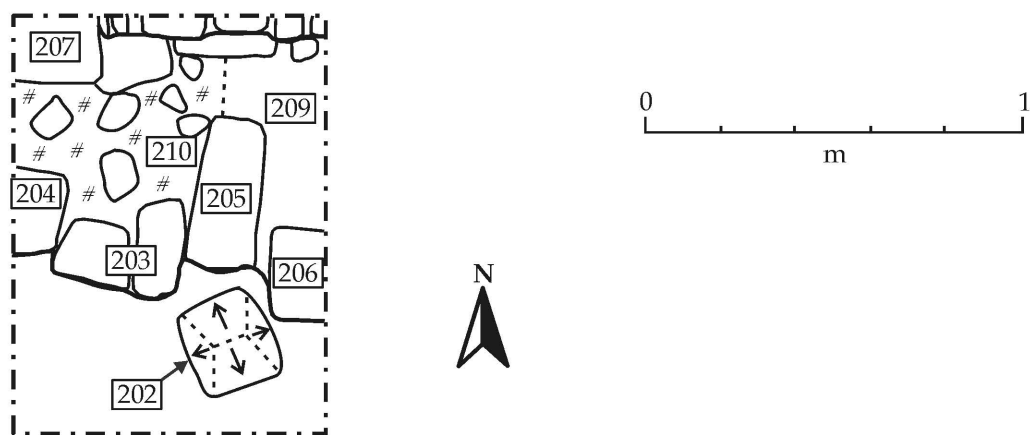


Fig. 1 : Plan (1:200) showing location of sump trench and trenches 1& 2

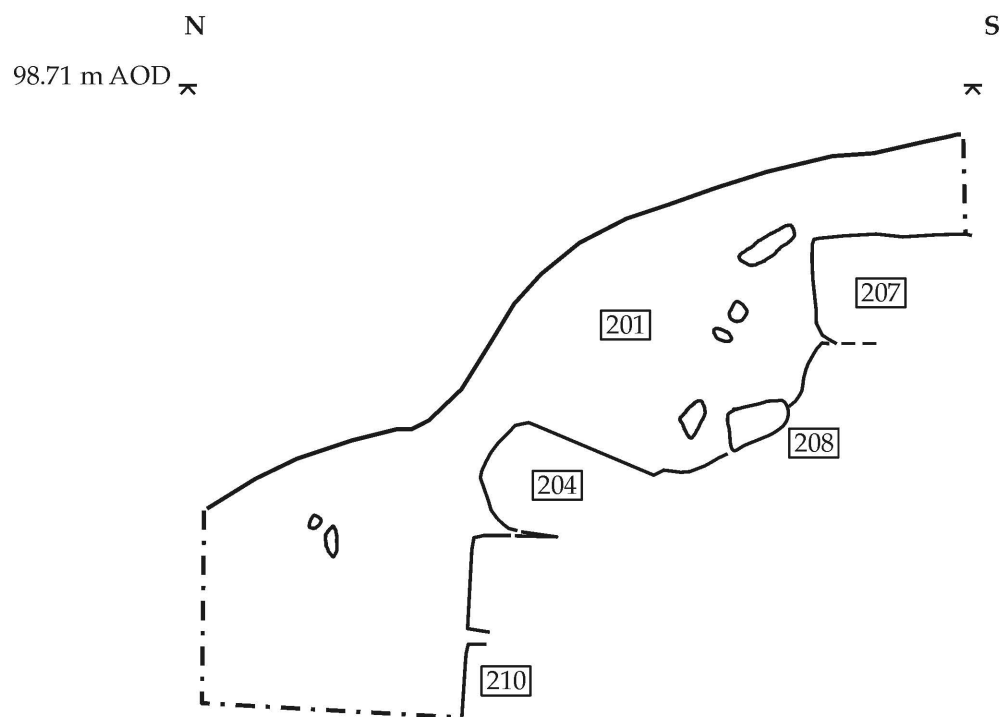


Ditch trench 1
Post excavation plan

Fig. 2 : Trench 1



Ditch trench 2
Post excavation plan



Ditch trench 2
West section (east facing)

Fig. 3 : Trench 2

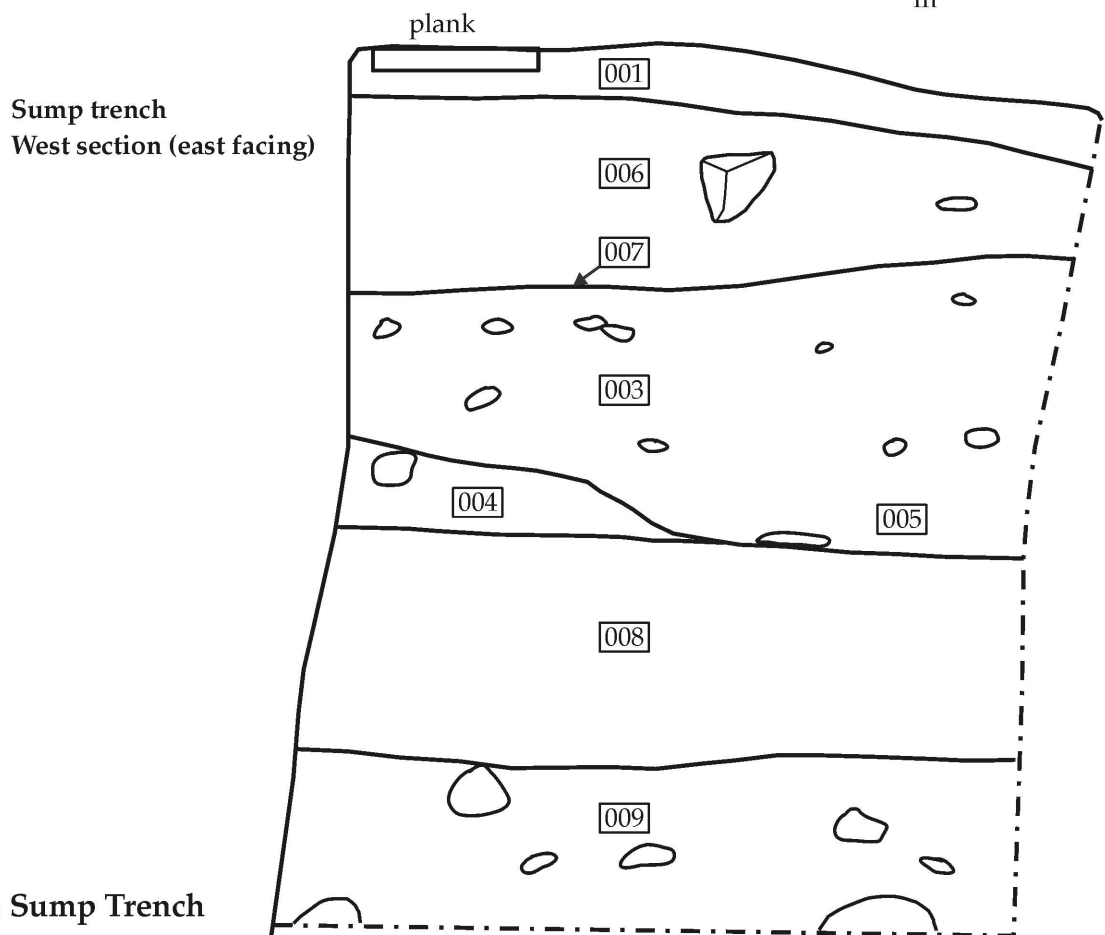
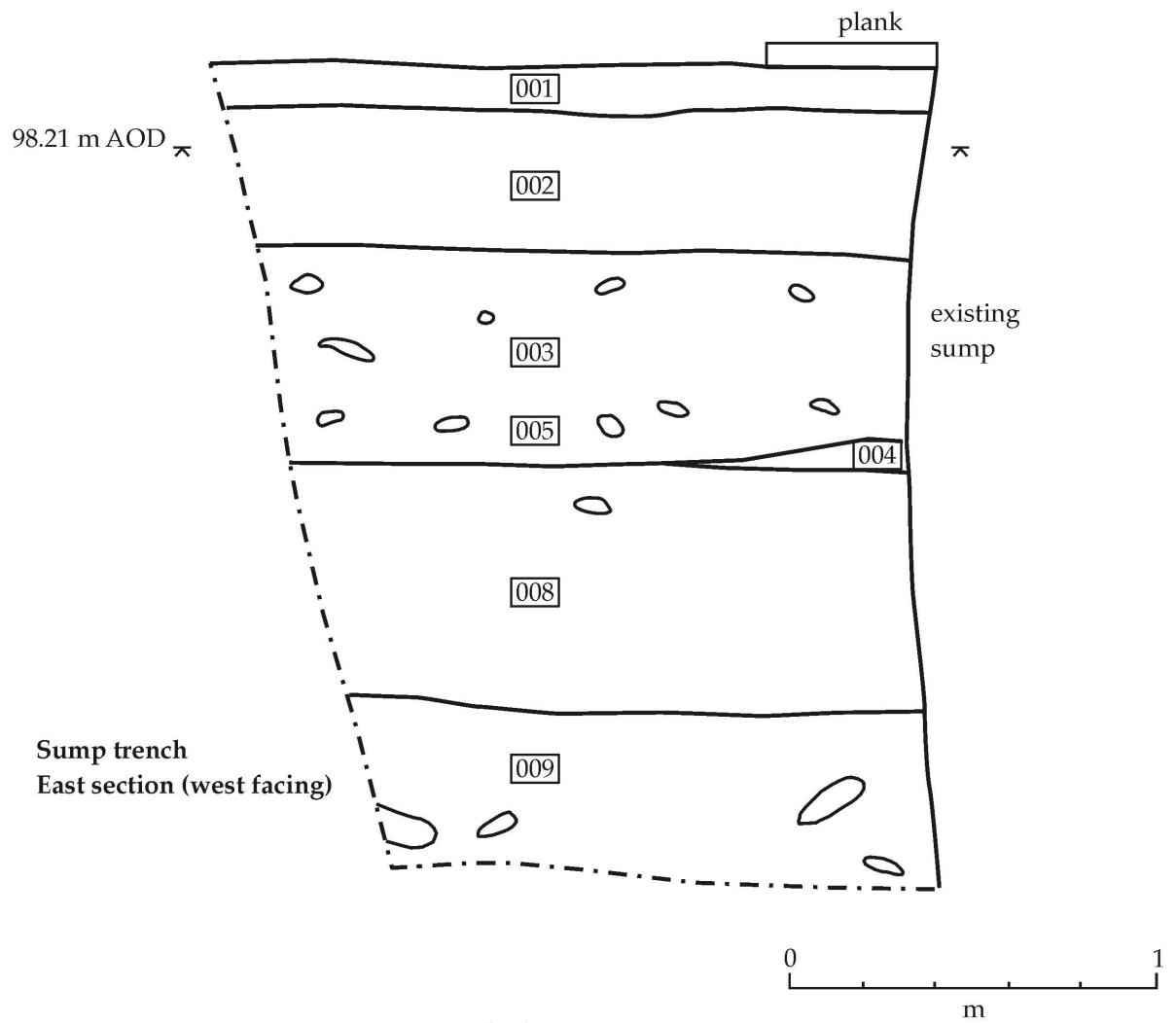


Fig. 4 : Sump Trench



Fig. 5 : E external elevation of Chapter House, lower part, showing feature numbers

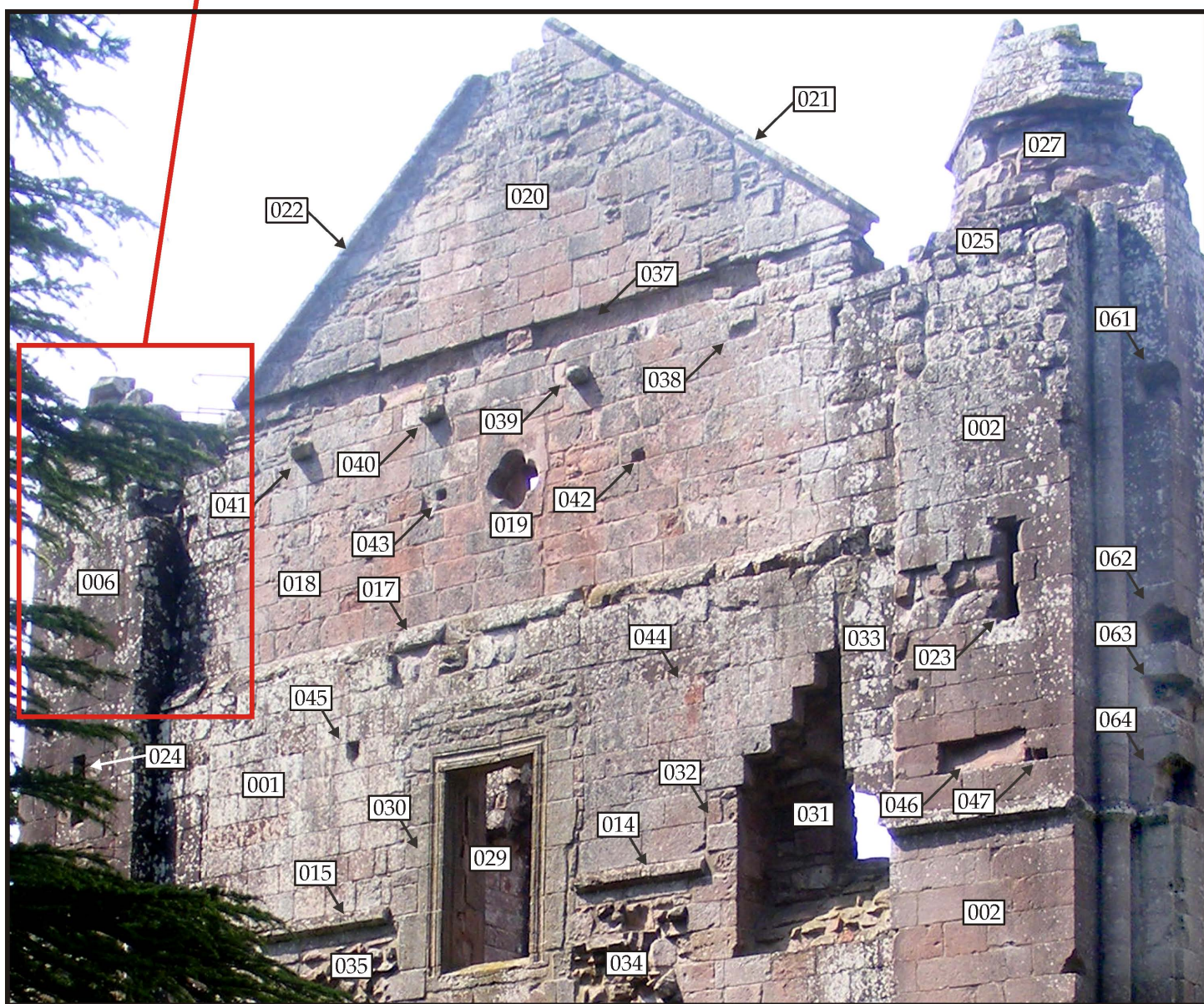
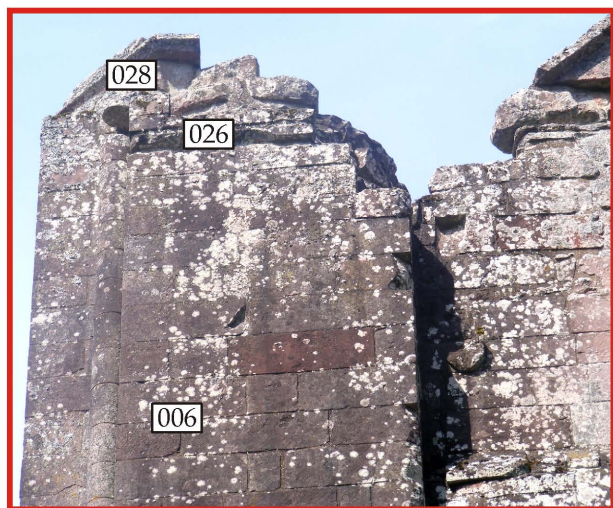


Fig. 6 : E external elevation of Chapter House, upper part, showing feature numbers

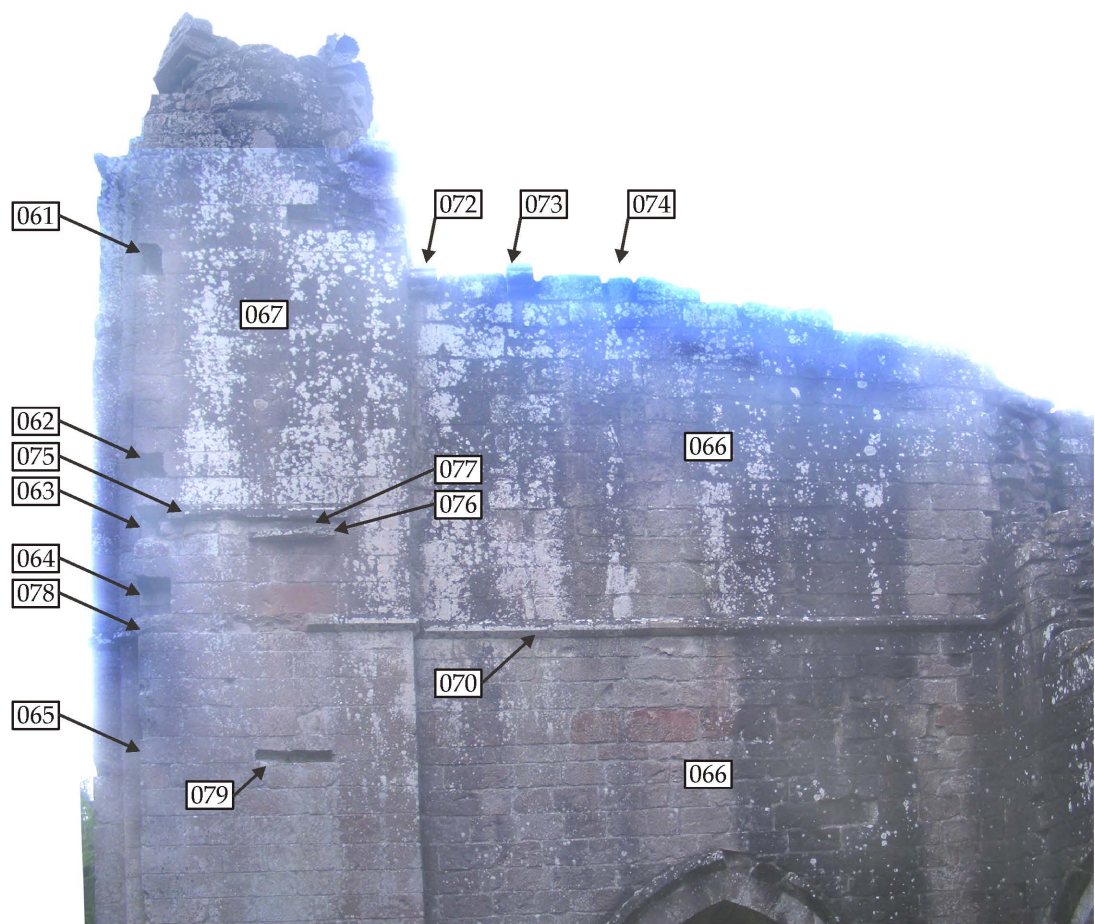


Fig. 7 : N external elevation of Chapter House showing feature numbers