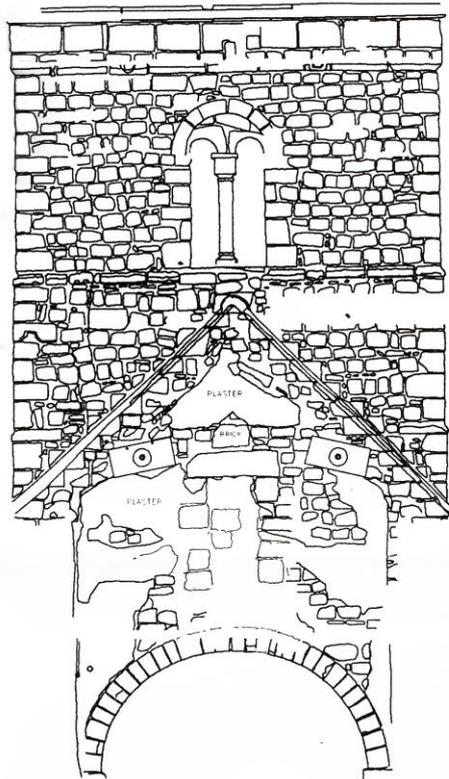


**The Parish Church of St Michael and All Angels,
Newburn-on-Tyne, and its West Tower**
Archaeological Assessment
combined with
Archaeological Recording of West Tower
after 2006 Fire



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St Michael and All Angels, Newburn and its West Tower

On the night of 20 March 2006 Newburn Parish Church was badly damaged by fire; the early 12th-century west tower was completely gutted (except for its lowest stage) and the 19th-century nave roof destroyed. In the following account the Tower, the focus of repair work and archaeological recording after the 2006 fire, is described first, with appropriate individual features being coded to cross reference with the Structural Inventory (see appendix) and drawings. This is followed by an account of the remainder of the building (a revised version of that prepared for a 2001 Archaeological Assessment, incorporating further recording work carried out during the 2006/7 repairs), and then a discussion of the structural history of the building

Newburn parish church stands on quite steeply rising ground on the north side of the Tyne valley, to the north of the main road through the village. It consists of a nave with four-bay nave that has both transepts and aisles, a west tower, a south porch, and an unaisled chancel with a vestry and organ chamber on the north.

The Tower: External Elevations



The **West Tower** is constructed of coursed grey sandstone, in quite small squarish blocks¹, with larger blocks as dressings and in the buttresses. 6 m square externally, it rises in three irregular stages (the lower making up more than half the total height) to a height of 14.4 m, each stage set slightly set back, and divided by strings which are now quite weathered but appear to have been chamfered on both upper and lower angles. Prior to the fire the tower had a low pyramidal cap; it now has a taller metal-clad pyramidal spire.

There are shallow clasping buttresses at all four corners of the tower, which rise to sloped tops at about two thirds the height of the lower stage; of those at the eastern angles, only the top of that on the north is visible externally, a little above the aisle roof. The west wall (figs 1,2) has no plinth, but c 0.15 m above ground level is an incised horizontal groove (A3) cutting the

¹On the south one or two blocks have a distinctive cross-hatch tooling, probably Roman; some of the large blocks in the buttresses have what appear to be Lewis holes, again an indicant of the re-use of Roman material.

ordinary walling stone, of uncertain age and purpose. The central blocked doorway (A1) has very large squared blocks in the jambs and a slightly segmental arch of smaller well-cut voussoirs, neatly curved on both intrados and extrados. The topmost block of each jamb is quite distinctive, being roughly-tooled gritstone; at the level of the base of these blocks there seems to be a change in the general walling stone from yellower to slightly purple in colour, and on either side, about 0.60 m in from the angle buttresses, and between c 1.2 and 2.0 m above the ground, are short vertical straight joints (A3 and A4) in the lower, yellower, stone. Set in the blocking of the doorway is a small round-headed window (A2), with a narrow chamfer to its surround; window and blocking (in which some stones have a tooled-and-margined finish) are all of 19th century work. Above the doorway is the groove of a roof-line (A8), now infilled in cement, relating to a former west porch added c1833 and demolished c1896; its apex is just below the sill of a small round-arched light (A9) above the door and it extends onto the northern corner buttress, indicating that the porch had its eaves c 2 m above the ground; lower in this buttress is an irregular socket which may have some connection with the removed structure. Window (A9) is ancient and has a round-arched head, cut into a pair of blocks, and a narrow chamfer. There is another old single-light window (A10), again set centrally, set just below the top of the lower stage; this one tapers slightly upwards, and has a segmental head cut into a single block. At the same level on the south (fig.3) is a similar but slightly wider window (B1).

The second stage of the tower has no openings, other than a large clock face on the south set in front of a small opening (B3) with a timber lintel.

The Romanesque belfry openings (A13, B8, C6, D11) are one of the most distinctive features of the Newburn tower; they suffered badly in the fire and of necessity have been reconstructed, using much new stone. Each has an outer round-headed arch (made up of neatly-shaped voussoirs like those of the west door) of plain square section, springing from imposts, chamfered on their lower angle; before the fire these were all much decayed. Recessed c 250 mm within the arch are two round-headed sub-lights, the head of each, again of plain square section, cut from a separate block. Between them is a mid-wall circular shaft with a moulded ring at top and bottom; before the fire only the western seemed to retain its original shaft and base, which seemed to be square at the bottom and octagonal above, although it was badly worn; the others were 19th century restoration. The shaft capital is a block chamfered on its lower angles, carrying an elongate slab, again chamfered on its lower edges, which in turn supports the arched heads of the sub-lights which are each formed by two parallel slabs, each c 250 mm thick, set on edge; the extrados of these slabs varied in form, sometimes being quite irregular, strengthening the impression that they were re-used pieces, perhaps taken from some Roman structure. Since the fire the shafts and heads of the sub-lights have all been renewed, except for the inner heads of those of the northern opening, and of the northern light of the eastern. The reconstruction of each opening entailed the taking-down and re-erection of the wall above, with the outer arches and jambs being restored using most of their old stone.

Above the belfry is an oversailing chamfered course, old in part, which carries the parapet; the parapet itself was partly 19th-century restoration (and is now largely new stone), and has a moulded coping; behind it rises the new spire.

The Tower: Interior.

The lower stage of the tower was relatively unaffected by the fire, although in the subsequent repairs its external north and south walls, now within the aisles, were stripped and re-plastered.

The tower opens to the nave by a wide and lofty semicircular arch (D1), virtually the full width of the nave (fig.7). Its head is of one plain square order, made up of pairs of voussoirs which each span approximately half the thickness of the wall, neatly curved on both extrados and intrados. The western face of the arch was badly damaged in the fire and all its dressings have been renewed; on the east damage has been disguised by the cutting of a new chamfer, which has a chamfered stop three voussoirs above each impost. All these dressings were quite neatly cut, but there was nothing definite to show that they had been heavily re-cut or renewed, as one might suspect at first glance. Towards the nave the lower metre or so of each jamb has been cut back diagonally, and finished above with an ogee-like stop c 1 m above the floor. The imposts are large blocks, chamfered beneath, with a groove directly above the chamfer; on the west they seemed to return into the side walls of the tower, seemingly indicating that arch and side walls are of one build.

The tower has an inserted floor or gallery that cuts across the tower arch. Beneath this the recess formed by the former west door (A1) is now only indicated by the internal opening of the small window (A2) inserted within it, which has a depressed segmental rear arch.

On the south of the tower (fig.3) is an archway into the south aisle (B13) of mid-to-late 19th century date, a plain square-section semicircular arch on jambs of same section, with imposts chamfered below and grooved like those of adjacent tower arch, all its dressings being of diagonally-tooled sandstone ashlar of 19th-century character, as with doorway C9 opposite. The doorway replaces a cupboard (B48) shown on the 1832/1833 plans, in the north wall of what was then a vestry, but which might conceivably have been an external doorway before the vestry was added in ?1826. The 1832 plan also shows a doorway (B46) and a cupboard (B48) to the west and east of the present archway respectively, which remain concealed by plaster. The 1833 plan shows the doorway B46 replaced a newel stair (B47), presumably of timber, is a square well occupying the whole thickness of the wall, replacing an earlier gallery stair at the north-west corner of the tower. This stair well – which must have threatened the structural integrity of the tower – must have been infilled after the present timber newel stair at the north-west corner of the tower was constructed late in the 19th century. During the 2006/7 works part of this infilled cavity was exposed, showing it to have been roughly quarried into the wall, with an overhanging and thickly-plastered east wall. The opening at the head of the stair showed on the internal face of the wall, from the gallery, as a blocked doorway (B16) 1.2m wide, with its west jamb only 0.25 m from the west wall. Returning to the south face of the wall as seen from the aisle, a row of sockets (B50) above and to the east of archway B13 probably related to the roof timbers of the early 19th-century vestry.

On the north of the tower is another 19th-century opening, the doorway (C9), identical to that nearby in the west wall of the aisle. It has a two-centred arch towards the aisle that has a hollow chamfer, broken by imposts, chamfered beneath, which carry to a hoodmould chamfered on its lower angle. The inner jambs are set square to the wall, and the rear arch segmental. To the east of this, only 250 mm from the north-eastern clasping buttress was a vertical feature, a cavity (C38) cut into the wall, fronted by bricks set on edge, containing a brown earthenware pipe, presumably a drain of some sort, slanting eastward at its base, where a large block at the bottom the clasping buttress had been renewed. A little over 1 m above doorway C9 was a row of sockets (C39) for ceiling joists in the aisle.

The first-floor of the tower is carried by a grid of moulded beams of late-19th century date, supported by two stone quadrant-shaped corbels on the west, south and north walls (A17/18, B 14/15, C 10/11). The beams survived the fire, although the boards which they carry have been

replaced. The open timber newel stair at the north-west corner also survived, although some members at the top have been replaced. Ascending to gallery level, on the south was exposed the blocked doorway B16 at the head of the 1833 newel stair, and a little above it a line of bricked-up sockets (B17 – B21) for the beams of a former floor, with similar features C13 and C14 on the north. On the west at this level the rear arch of window A9, of neatly-cut voussoirs, was badly damaged by the fire and is now plastered over. On the north is window C12, now opening into the roof of the aisle; its rear arch (fire damaged and now plastered over) is of rather distorted semicircular form, and seems an original 12th century feature, but the outer opening, square headed with a square-section surround, and a slightly-projecting sill, is perhaps of 18th or 19th century date.

A little higher has been another floor level, in this case indicated by two corbels on each wall – A18/19 on the west, B 22 /23 on the south, C 15/16 on the north and D 14/15 above the tower arch on the east. Some of these were damaged; all have been restored and now carry a floor again. The former floor above these corbels has had a high-level doorway, D2, on the east into the nave. On the east face of the wall this appeared as a blocked square headed opening 1.55 m high by 0.70 m wide, with heavy squarish blocks in its jambs, rebated internally with a socket 0.15 m deep in the south jamb and a cut for a drop bar (?) opposite. On the east (nave) face of the wall the jambs of this doorway are cut into be a sloping groove, infilled with rubble, which seems to indicate the line of a former low-pitched roof to the nave. The rear arch, towards the tower, a semicircular arch with neatly cut voussoirs, now somewhat fire-damaged. The sill of the opening had been raised by three courses of brickwork, of no great age. The rebated outer opening and rear arch related rather awkwardly, suggesting the former was a late modification, although this was probably always a doorway rather than a window. The blocking of the upper half of the opening looks more recent than that of the lower; a door pin on the south jamb and small loop on the north may have related to a hatch closing this reduced opening. . Brooke (2000, 191-192) saw the evidence that this doorway could be locked from the tower as implying that the tower might have been considered as a defensible retreat. Just above the level of the renewed floor is window B1 on the south, and just below it at the north-east corner a diagonally-set metal plate C17 (still in place); loose rubble and brick above were cleared to reveal a crudely-cut hole dropping into the pipe (C38).

Infilled sockets on south (B26-28) and north (C18-22) indicated another former floor c 2 m above the corbels; a charred beam (D20) against the east wall survived in situ; two east-west girders (their sawn-off stubs remain) had been inserted directly beneath to provide additional support for this floor, which carried the belfry. There was evidence of another beam (D21) on top of D20, and above that the ghost of a one end of the bell-frame (D22) is cut into the wall. Other sockets at higher levels (see Structural Inventory and drawings) presumably relate to various phases of bell frames. These walls remain exposed; new bell frames have been constructed, with above them a metal newel stair set centrally rising through a concrete slab floor into the spire, and a doorway pout onto the parapet.

Large sections of the wall head of the tower were rebuilt in 2006/7; whilst the actual parapet had been rebuilt, at least in part, the wall top included several slabs hollowed out as drains, with narrower spouts which ran out beneath the parapet. Towards the east end of the northern wall head two sections of medieval cross slab grave covers had been re-used, face up, immediately to the east of one drain/spout. Another section of one of the same slabs retrieved from the western wall head had been turned upside down and its rear face hollowed out as a drain.



Re-used cross slabs and drain slab on north wall head of tower, 23 1 2007

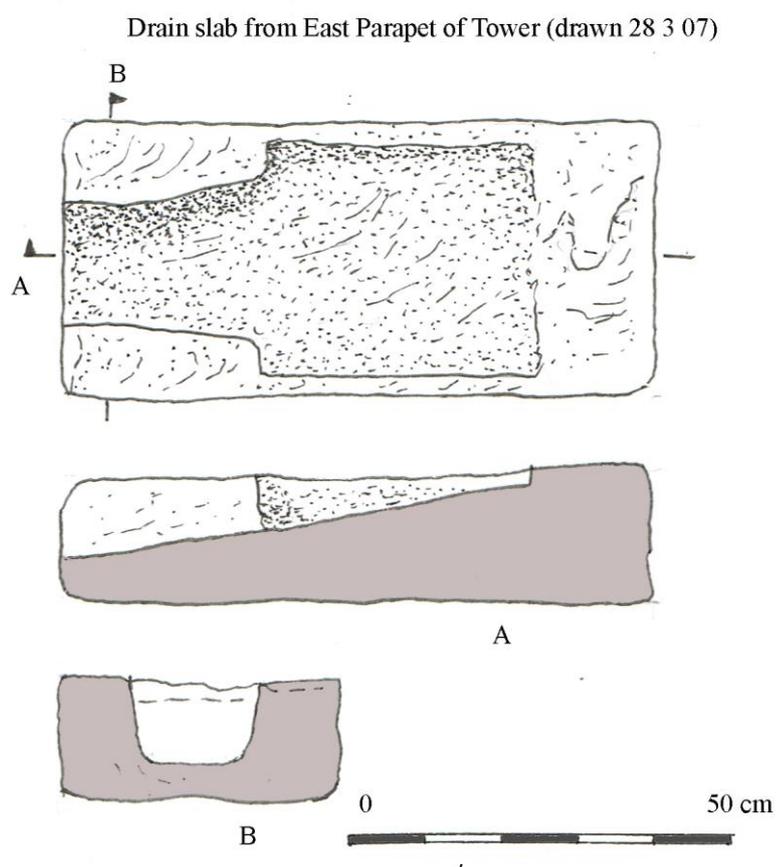


Fig.1
West Tower,
West Elevation

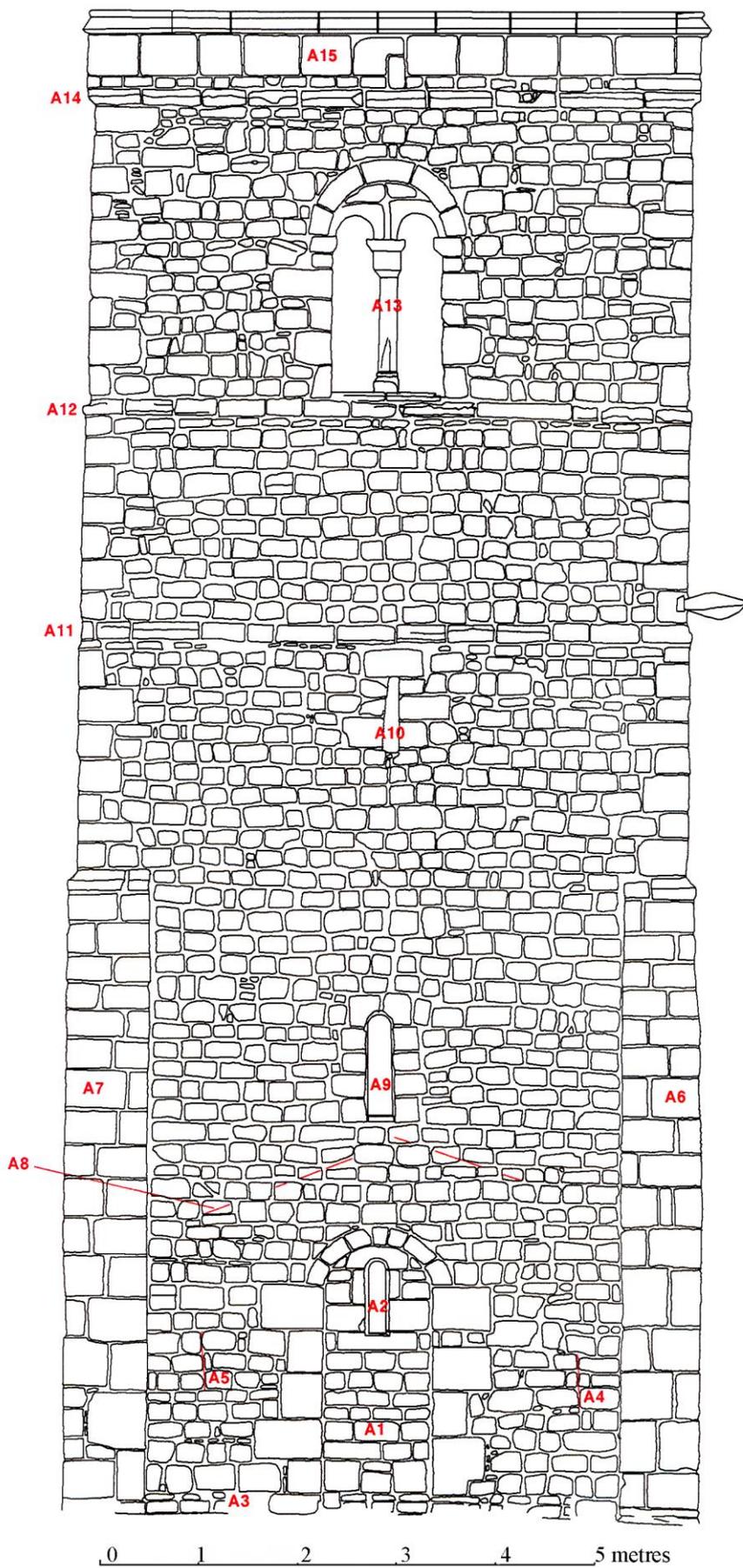


Fig.2

West Tower

Internal Face of
West Wall

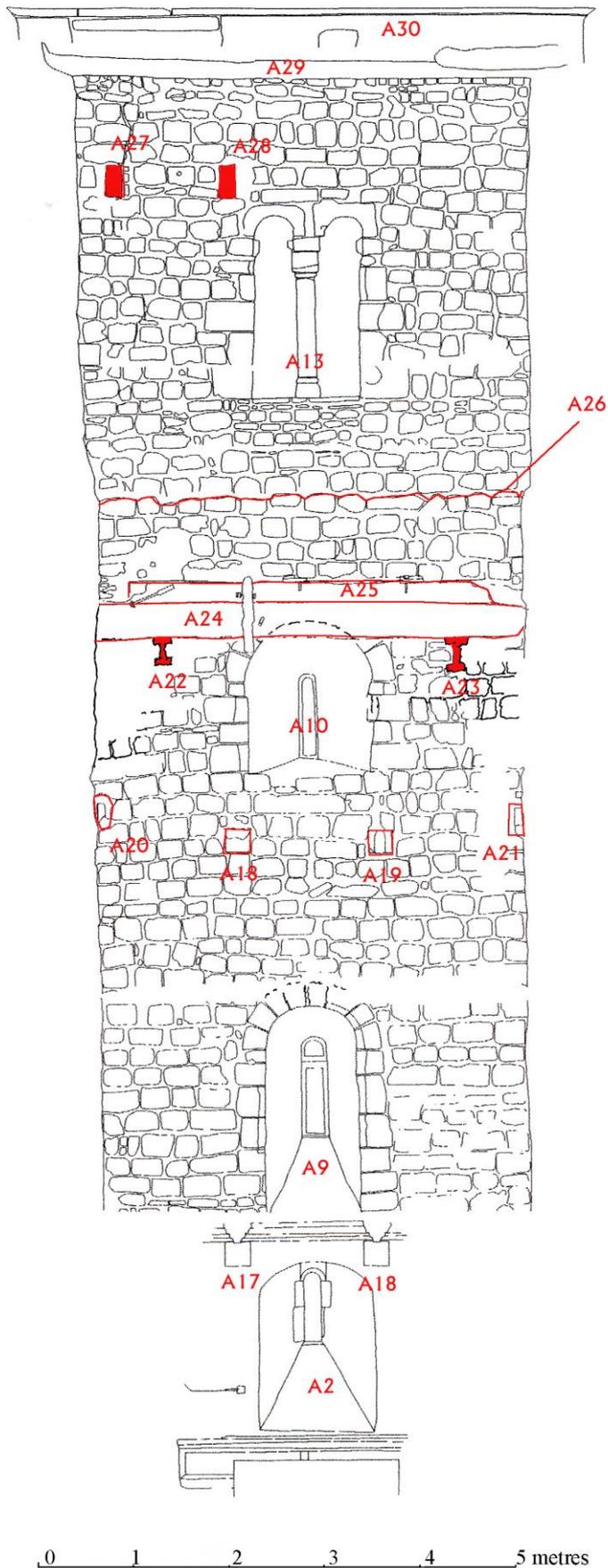
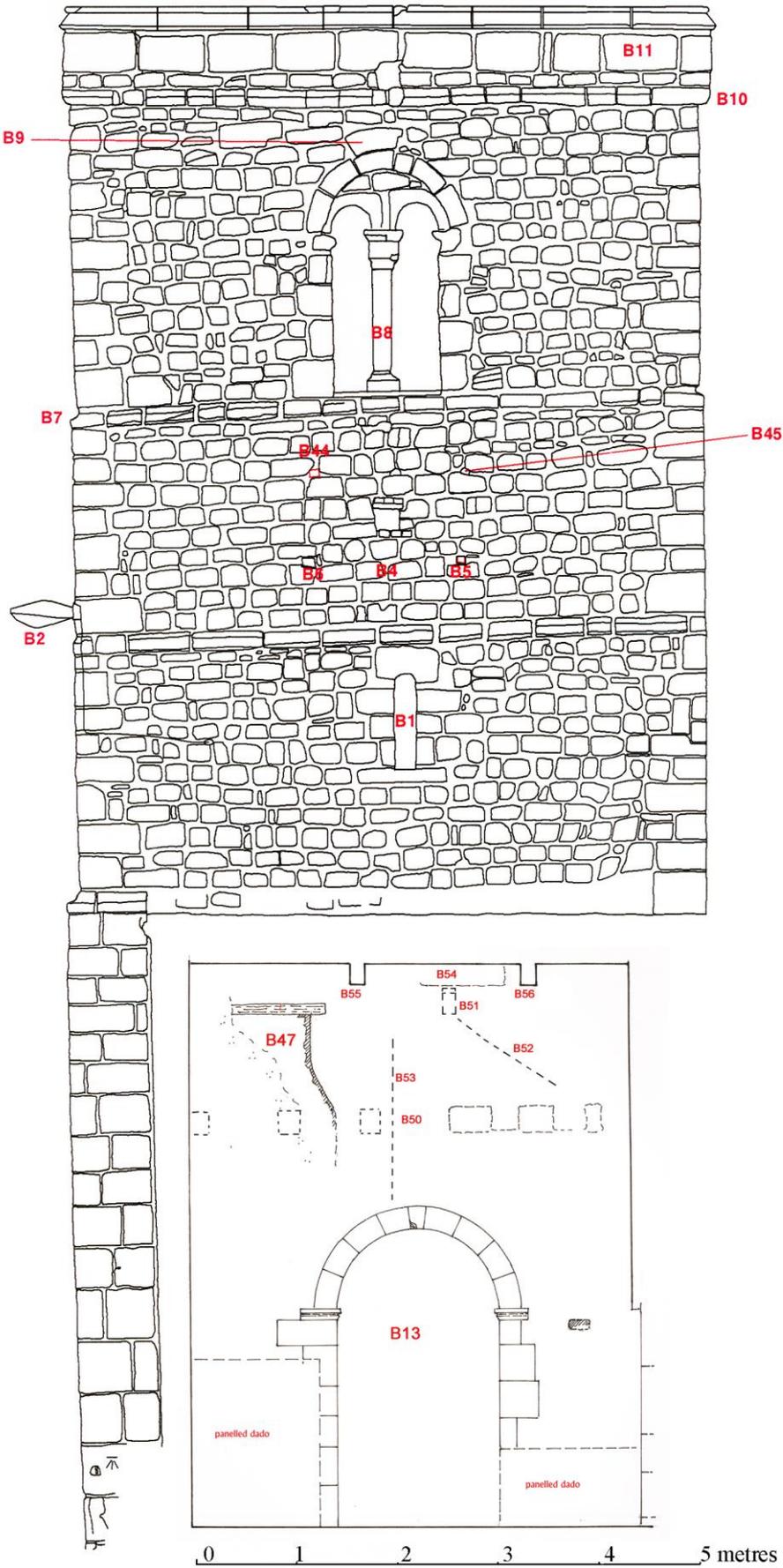


Fig.3
West Tower,
South Elevation



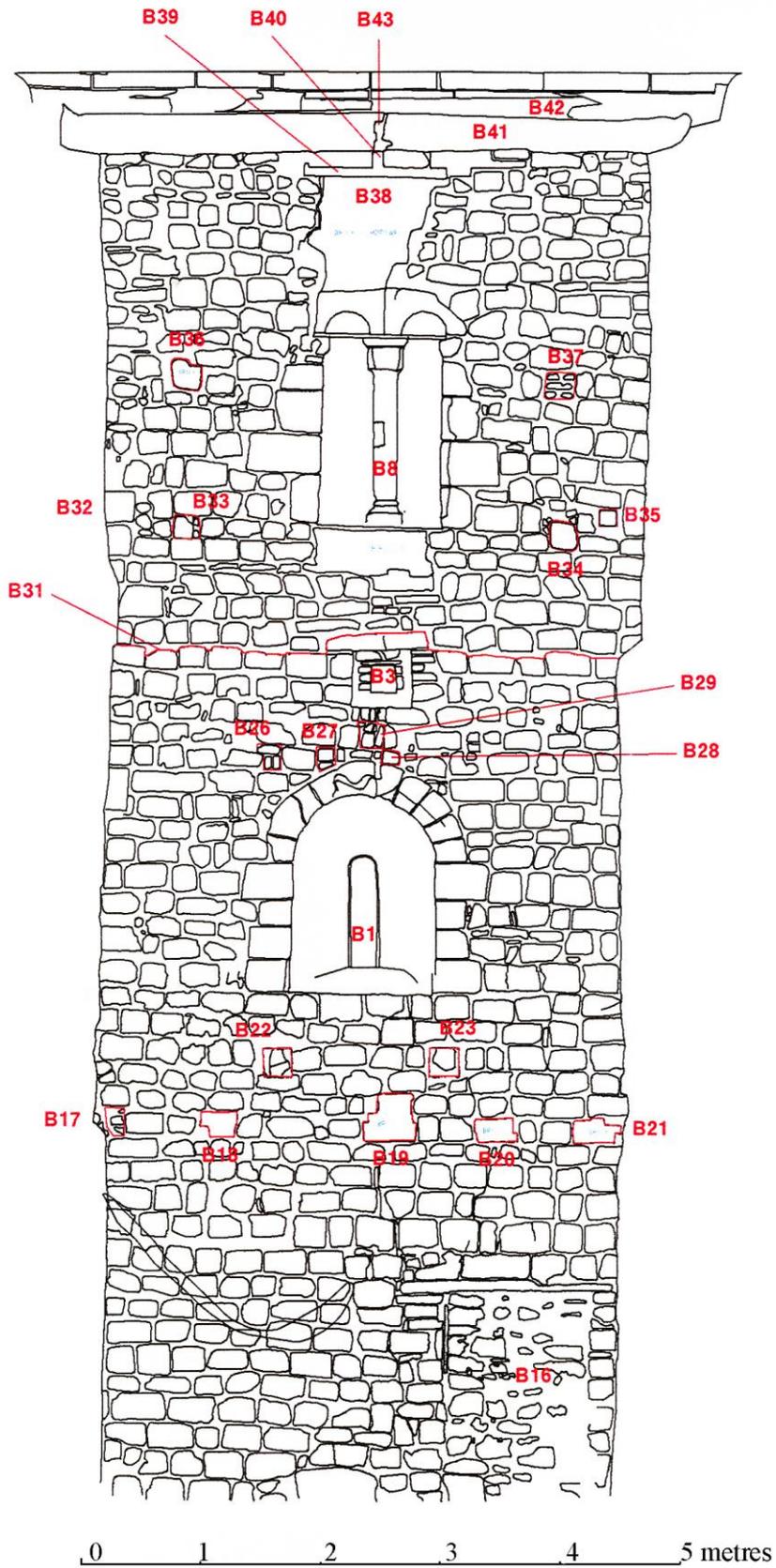


Fig.4
 West Tower
 Internal Elevation
 of South Wall

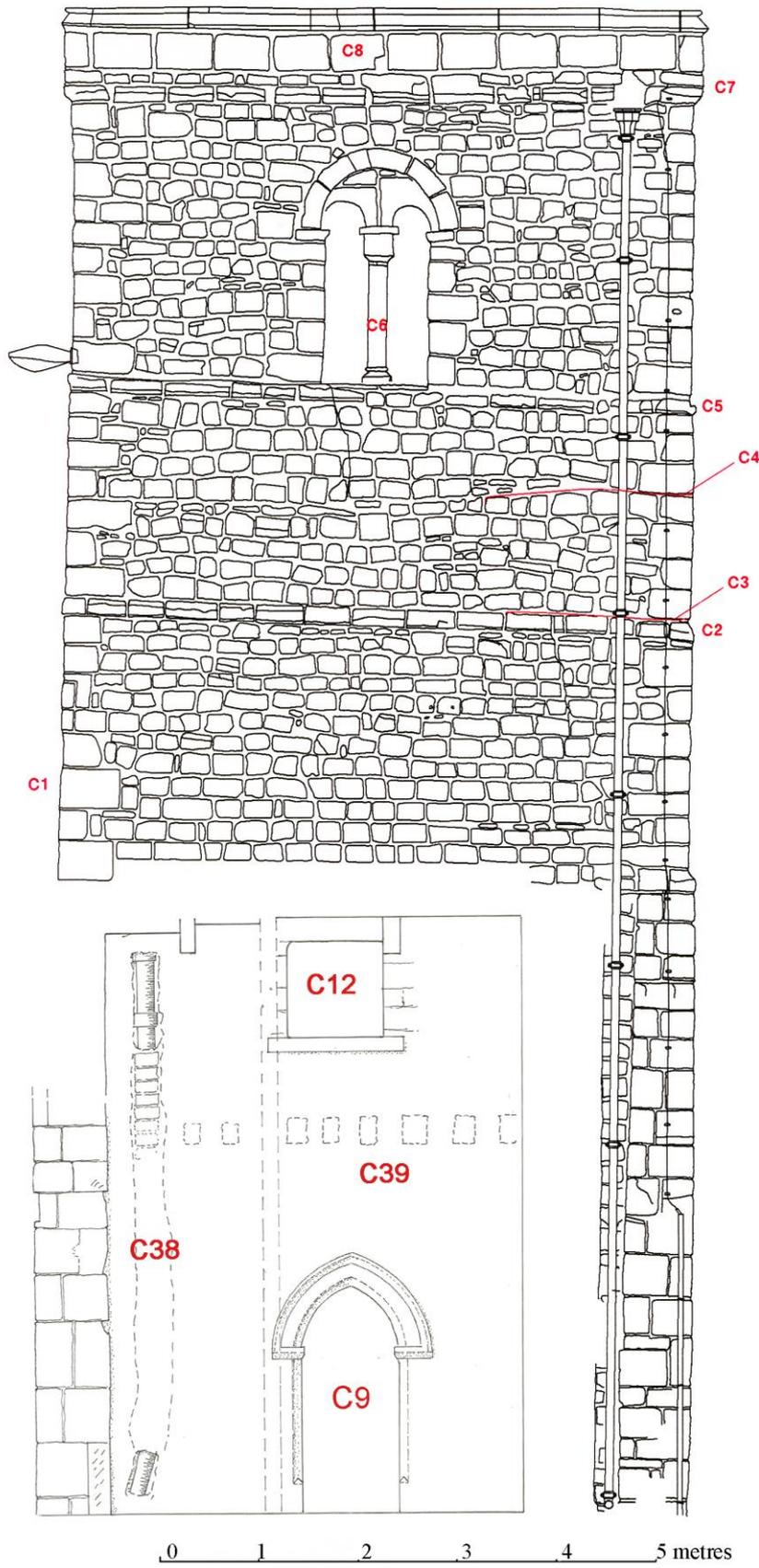


Fig.5
 West Tower
 North Elevation

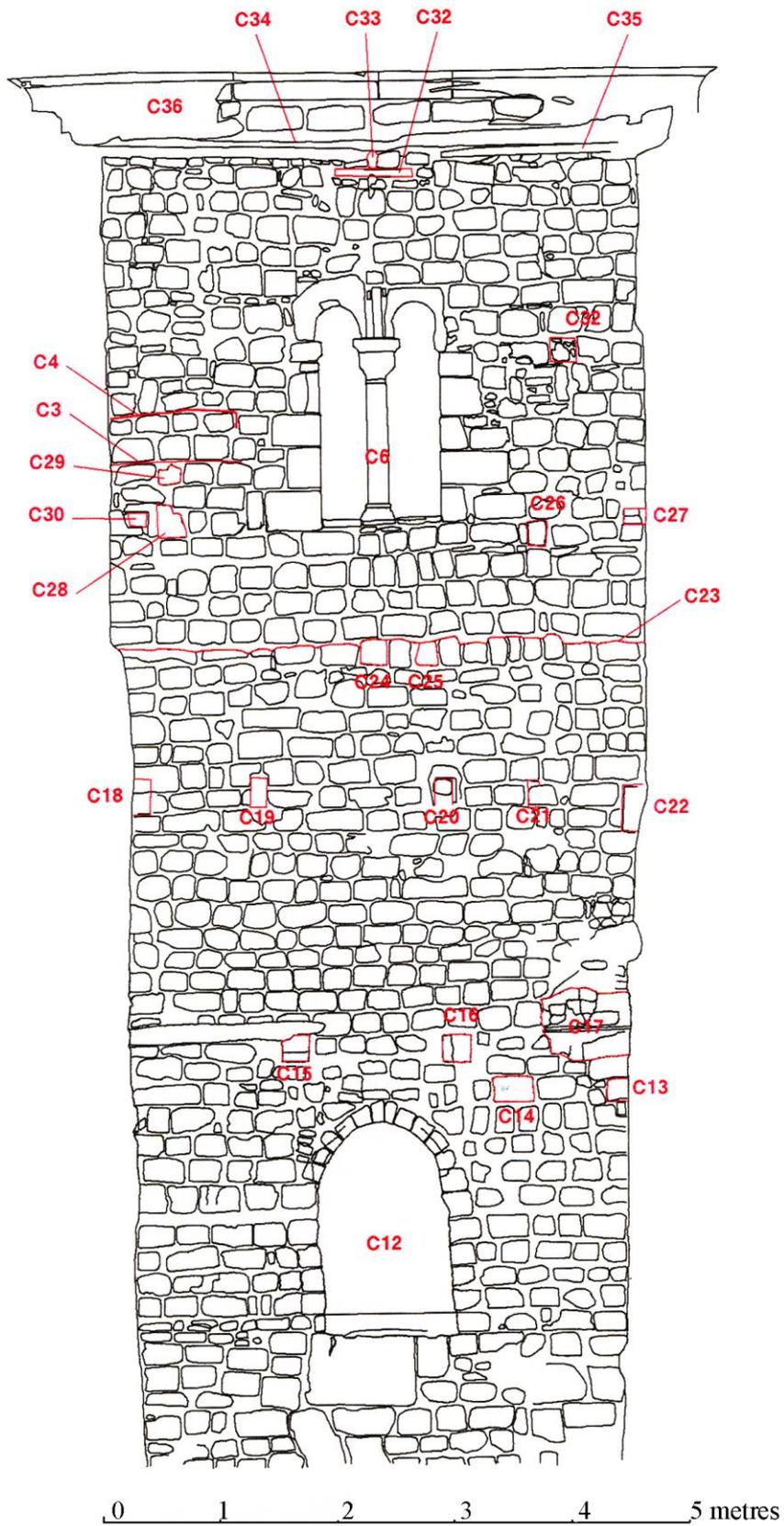


Fig.6

West Tower

Internal Elevation of
North Wall

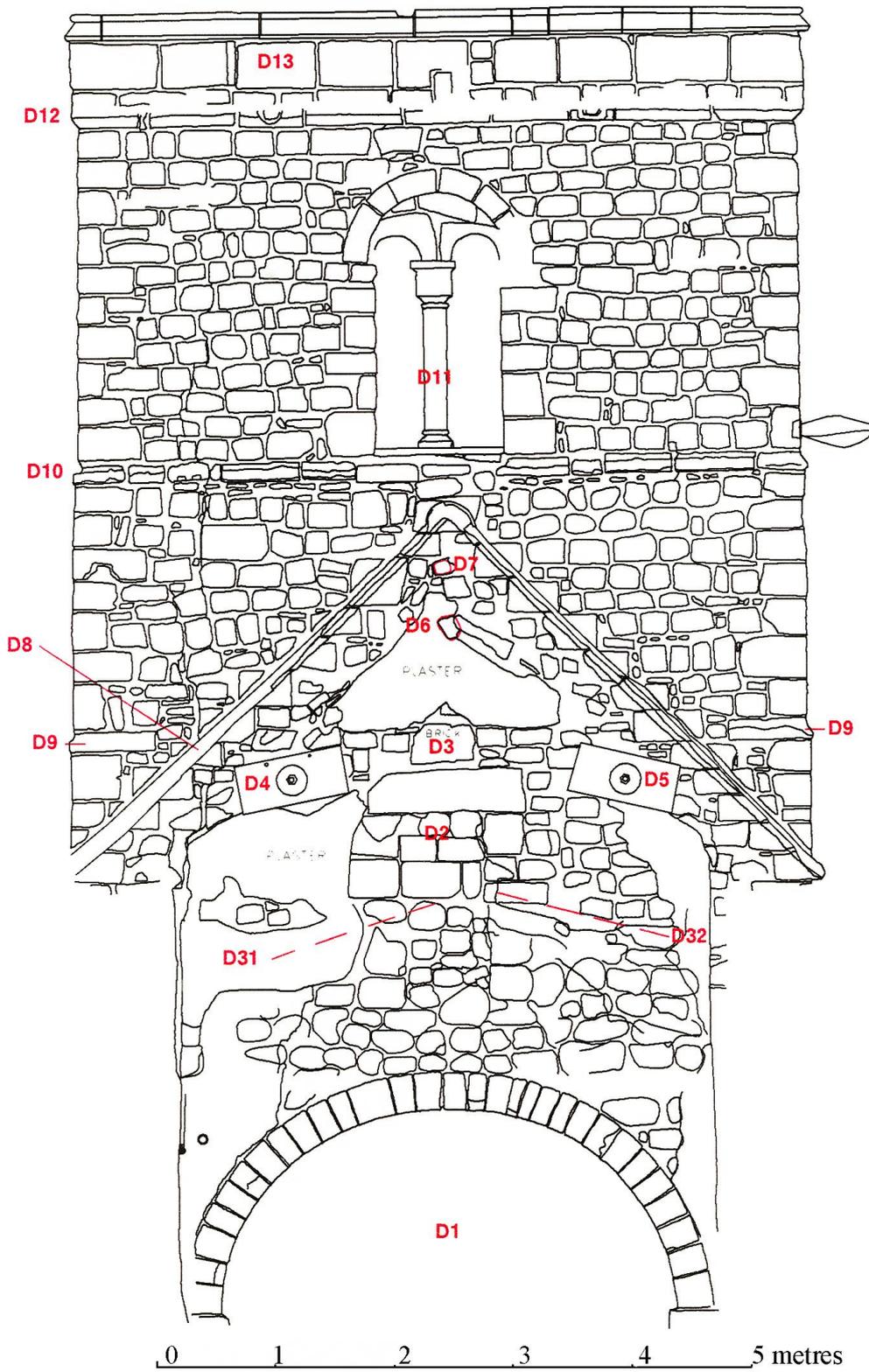
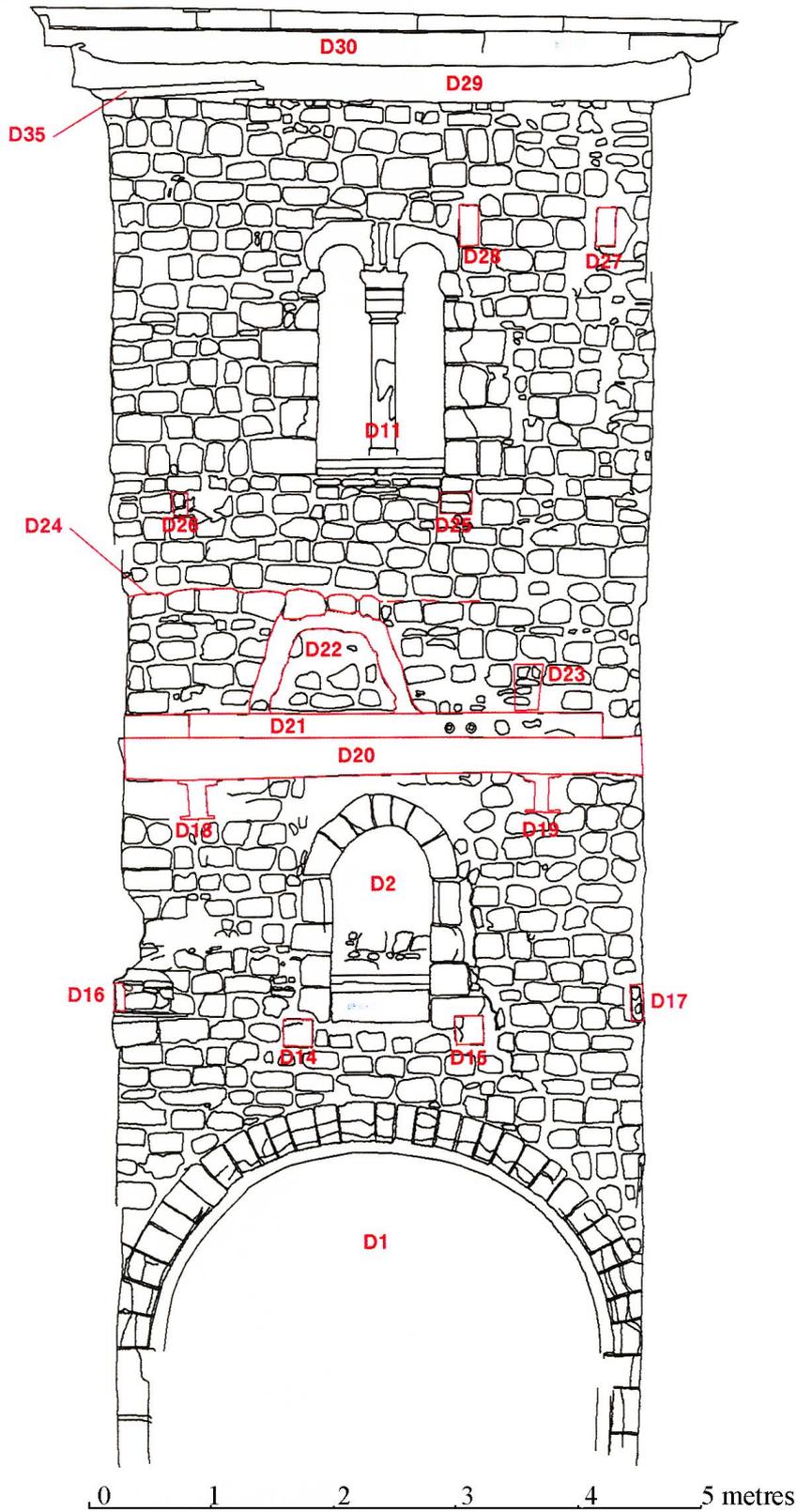


Fig.7
 West
 Tower
 East
 Elevation

Fig.8

West Tower
Internal Elevation
of East Wall



The Remainder of the Church

Exterior

The external walls of the **Nave** are only exposed above the aisle and chancel roofs, except for the very edge of the south-eastern quoins, in the angle between transept and chancel. This shows the quoin to consist of a series of massive gritstone blocks, Pre-Conquest in their character². The clerestory wall on the south of the nave has large areas of coursed yellow stone, in quite elongate blocks, and some larger blocks. There appears to be a joint c 1.0 m from the west end of the wall, with darker blocks to the west. On the north of the nave is a mixture of large squared blocks and smaller and more yellow coursed sandstone. A little more of the height of the wall can be seen at the north-east angle, above the organ chamber roof, and here one large old quoin is exposed.

The clerestory on each side consists of four circular windows, with chamfered outer surrounds, within which the westernmost on each side has quatrefoil cusping, the next two trefoil, and the eastern is a plain roundel. All look to be of later 19th-century date, as is the oversailing chamfered eaves course in yellow sandstone ashlar.

The east gable of the nave is largely of 19th-century masonry, and has an oversailing ashlar coping, chamfered on its lower angle, rising from a chamfered ashlar kneeler and a cross finial. Old stonework may survive just above the chancel roof, possibly indicating an old gable line, pitched a little steeper than the present chancel roof, with its apex a little above it.

The west end of the **South Aisle** is of squared and coursed dark sandstone, with quite narrow joints; the quoins are tooled-and-margined in a manner typical of the late 18th or early 19th century, and are laid in side alternate manner. There is no plinth. The west window is a broad chamfered lancet with a simply-moulded hood, which from the manner in which its jamb stones cut into the adjacent fabric seems to be an insertion. The wall has an ashlar coping, chamfered on its lower angle. The south wall has a square-section band at the eaves.

The south wall of the aisle to the east of the porch looks to be a different build; the tooled-and-margined surrounds of the windows are of slightly different character³ to the angle quoins, although the general fabric type is similar. This section of wall is of two bays, each with a pair of chamfered lancets with alternating block surrounds and simply moulded hoods. A groove in the wall face indicates the shallow-pitched roofline of the south porch demolished c1826 – and incidentally shows that the aisle wall was not completely rebuilt at that time. The roof-line has its apex on the centre of the head of the eastern light of the western double lancet and its eaves c 2.0 m above the ground. A short straight joint just above ground level, above an L-shaped stone that might indicate the base of a nook shaft, probably represents the west jamb of the earlier south doorway. At the extreme east end of the wall, c 1.8 m above the ground, is a re-used piece of pre-Conquest sculpture.

²Although it should be borne in mind that similar blocks, not much smaller, are used in the clasping buttresses of the Norman tower.

³The chamfer on the blocks of the jambs looks secondary, as if the blocks are re-used from an earlier opening; the light diagonal tooling on the broad ‘mullions’ between the lancets is quite different.

The **South Porch** is of similar fabric to the Organ Chamber/Vestry, ie snecked roughly-tooled stone with ashlar dressings. There is a two-part plinth (the lower chamfered, the upper moulded) and diagonal buttresses at the southern angles. On the south is a two-centred doorway with quite elaborate mouldings, and a moulded hood which is continued to either side as a string which rounds the buttresses. Above is an elaborate canopied niche with a richly-carved corbel at its base carrying a statue of St Michael, and two shields with monograms; the steep gable has a moulded coping and a cross finial. The side walls of the porch each have a square-headed window of two trefoiled ogee-arched lights and pierced spandrels.

The western bay of the **North Aisle** is of coursed squared stone, but not as well finished as that on the south aisle; its angle quoins have light diagonal tooling; the coping of the end wall is however similar. In the west wall are doorway very like the internal one in the north wall of the tower and to the north of it another pair of 19th-century lancets of the usual type, but with diagonally-tooled rather than tooled-and-margined dressings.

On the north side of the aisle the western bay is of coursed and squared stone, including some elongate blocks that are probably older material re-used; in line with the east wall of the tower is a clear break, the fabric beyond being much darker stone

The western bay and the two beyond both have paired lancets; those in the first bay have diagonally-tooled dressings, and the others tooled-and-margined ones like the similar windows in the south aisle. The lower section of the wall of the easternmost bay is concealed behind a later flat-roofed boiler house.

The **South Transept** is built of roughly-coursed blocks of sandstone, varying in height; some of the blocks are almost square. There is a chamfered plinth (in part renewed) and stepped diagonal buttresses at the southern angles. The west wall is largely concealed by the adjacent aisle; it does have a parapet of two courses of large blocks (probably of 19th-century date; the moulded coping certainly is), laid on a slight slope in contrast with the horizontally-coursed masonry below, which shows slight traces of a possible former steeply-pitched roof to the aisle.

The south wall of the transept has a large window in the style of c1300, of three lancet lights, with the spandrels pierced, under a two-centred head and a simply-moulded hood with turned-back ends. The chamfered jambs, of quite irregular buff-coloured sandstone blocks, are of some age, but the remainder of the dressings are of 19th-century date. At the head of the wall, the lower of the two courses of the parapet looks ancient; immediately below it, close to each end of the wall is a projecting gargoyle in the form of a beast's head; these are almost certainly genuine medieval work. There is a disturbed area of masonry close to the south-western buttress, between c 2.5 and 4 m above the ground; it may indicate a relatively-recent repair.

On the east of the transept the walling beneath the plinth looks like later underpinning, and is of much smaller masonry than the coursed blocks above, where there is another three-light window with parallel-tooled 19th century dressings except for old work in its chamfered jambs; its three principal lights and the sub-lights above all have four-centred arches; the arched head has a chamfered hoodmould with turned-back ends. Around the head of the window is a clear patch of secondary masonry and to the north a section of straight joint between c3.5 and 5 m above the ground. It is not clear what this represents; it is possible that there may have been some sort of high-level opening here, perhaps a doorway associated with stairs to a former gallery.

The **North Transept** is largely of dark squared sandstone, close-jointed and roughly tooled, quite like the west end of the south aisle; however, the lower metre or so of the walls is of much smaller and more irregular stone. It is not clear whether this represents earlier fabric, or simply a section of wall that was intended to be below ground level, and has been exposed by a later lowering of the external ground level. There are neat side-alternate quoins, and an ashlar coping to its asymmetric gable, chamfered on its lower angle. The three-light window in the north wall is similar to those in the south transept south wall and chancel east end, with a tooled-and-margined alternating block surround⁴; the gable above has a coping chamfered on its underside and a plain cross finial

The west wall of the transept (which on this side of the building projects some distance beyond the aisle wall) looks to be of older, perhaps medieval fabric; it is composed of quite small and irregular sandstone blocks, roughly coursed.



South-east view

The south wall of the **Chancel** is articulated into three bays by stepped buttresses, which have chamfered plinths and sloped tops; above is a projecting eaves course, chamfered on its lower angle, of 19th-century ashlar.. The buttresses are of roughly-squared and roughly-tooled blocks of dark sandstone, and appear to be of 19th-century date. The wall behind is of roughly-coursed sandstone blocks, degenerating in some areas into little more than rubble. In the western bay, close to edge of the south-east nave quoin (see above) are some quite large blocks, bounded by a ragged joint between c 0.3 and 0.5 m from the quoin⁵. The wall to the east of this, or at least

⁴Unlike the aisle windows, the central panel of the tooling here ends short of the edge of the chamfer rather than appearing to be cut by it.

⁵These may be what the NCH account identifies as the angle quoins of a 12th-century chancel initially built as a free-standing structure; it seems more likely that they are simply represent a remnant of chancel wall undisturbed by later rebuilding.

its upper section, may be 19th-century rebuild. There is no real plinth to this bay, but there is a roughly-projecting course at the foot of the wall. The bay has a single lancet window with a chamfered surround, under a casement-moulded hood with turned-back ends; most of its dressings are of 19th-century character, although those to its lower half are of darker stone, and could be old material, although perhaps re-used.

In the second bay are remains of a blocked priest's door, partly hidden by the first buttress. Two blocks of its east jamb remain in situ; the dressings have been removed from its arched head, the position of which is marked by a patch of more thinly-coursed masonry. In the centre of this bay is a second lancet window of the same type as that in the first; in this case all its dressings look of 19th-century date.

In the third bay a plinth commences c 0.70 m east of the second buttress, at first as a rough step, and then becoming a chamfered course. There is a third similar window which like that in the western bay has older blocks in its lower jambs. Immediately to the east of the second buttress is a vertical break, a straight joint in its lower sections and more ragged above, which disappears c 4 m above the ground; there is also evidence of disturbance immediately west of the same buttress. These may be what the NCH description (125) refers to as 'traces of an oblong opening' but could also simply relate to the keying in of the buttress to the wall.

At the south-east angle of the chancel are a pair of stepped buttresses, that on the east of greater projection and a little taller; the chamfered plinth extends around both of these.

The east end has quite a bold chamfered plinth, which is set slightly skew to the wall face above – at the south end the chamfer is set forward c 150 mm from the wall above but this reduced to c 50 mm at the north end. The wall above is of coursed sandstone blocks, like most of the south wall. The east window is similar to that in the south wall of the south transept, of three lancet lights with the spandrels pierced; its tooled-and-margined dressings all look of 19th-century date. The walling of the gable above looks to be a 19th-century rebuild, although the break between this and the older fabric beneath is not very clear; there is a slab coping and a foliated cross finial. The stepped buttress at the north end of the wall matches that on the south, and looks authentic medieval work; the plinth beneath it seems continuous with that of the main wall.

Only the extreme east end of the north wall of the chancel is exposed externally, and has an old buttress very like the corresponding one at the east end of the south wall.

The **Vestry/Organ Chamber** extension is built of snecked roughly-tooled stone with diagonally-tooled ashlar dressings and a projecting ashlar course at the eaves. Its east wall has a square-headed two-light mullioned window with a chamfered surround at its south end, with a square-headed doorway to the north, that has a chamfered surround with broach stops at the base of the jambs. On the north are another two-light square-headed window and, near the west end, a window of three-lights ⁶with simple panel tracery over, the three main lights and enclosing arch all being four-centred. Although all its dressings are of 19th-century character, its head is monolithic; does it replicate of a medieval original?

⁶Probably re-set from the north wall of the chancel.

The Interior

The interior of the church is generally plastered and whitewashed, except for exposed dressings around some of the openings, and of the shallow buttresses at the east ends of the side walls of the tower. The internal walls of the south porch are of coursed and tooled stone.

The **Nave** has four-bay arcades. The north wall, above the arcade, is c 0.65 m thick, and the south wall rather thicker; it is difficult to measure accurately, but seems to be c 0.70 m at the east end and around 0.80 m at the west.

The north arcade has circular piers, semicircular responds, and semicircular arches of one plain square order. Both piers and responds have moulded bases set on octagonal / semi-octagonal plinths; the piers have broad capitals with waterleaf ornament, below a square abacus grooved chamfered on its lower angle (like the impost of the tower arch); the responds have simple moulded caps. From the capital of the central pier an additional arch springs north to span the north aisle; it is of semicircular form and of plain square section; on the aisle side it is carried by a projecting semicircular respond. The whole construction dates from the 1822/3 works. Respond and arch are all plastered over except for the ashlar capital of the respond, which is modelled on the arcade capitals.

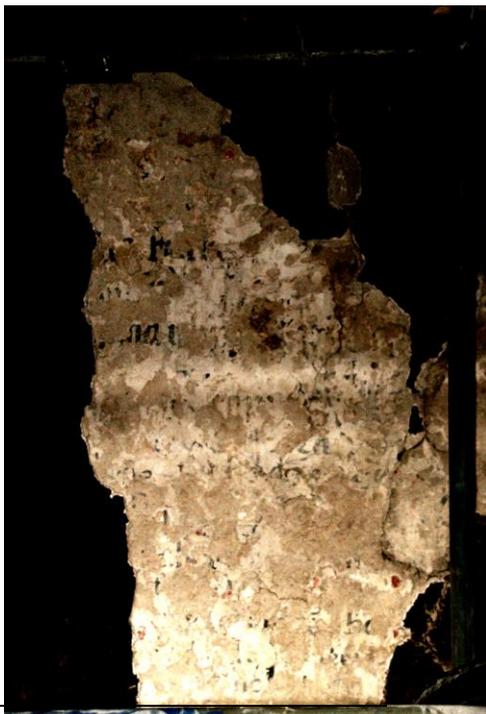


Interior looking east

The south arcade has a central circular pier between octagonal ones; the western respond is semicircular and the eastern semi-octagonal. All have moulded bases (somewhat damaged; that of the western respond has virtually gone), set a little lower than those of the north arcade; their plinths are concealed by the floor. The capitals all have similar mouldings, except for that of the eastern pier which has a line of nail-head. The arches are of two-centred form and each of two chamfered orders; there is a hoodmould, chamfered below, towards the nave only.

From the capital of the central pier an additional arch spans the south aisle; it is of distorted four-centred form, and is of two chamfered orders, although much hacked about. On the aisle side it springs from a projecting semi-octagonal respond, concealed by plaster except for its ashlar capital, which although modelled on those of the arcade is clearly of 19th-century date. The relationships between the south arcade capitals and the wall faces above are rather strange; towards the aisle the wall-face markedly overhangs the capitals, probably implying that the arcade is an insertion in an older wall.

The clerestory windows above the arcades have segmental-pointed rear arches with chamfers to their heads, their exposed ashlar dressings clearly being of later 19th-century date. When the walls were partially stripped before replastering after the 2006 fire, remains the sills and lower jambs of previous windows were exposed. On the south the predecessors of the present openings in the first and second bays from the west had each been c 2.50 m wide, with quite broadly-splayed jambs; each had its west jamb close to that of the present window, but extended considerably further to the east. A third earlier opening was in the position of and only slightly wider than the present window in the fourth bay, and this appeared to have had more steeply-splayed jambs.⁷ On the north traces of two more broad openings were seen, in the first bay (west jamb in line with that of the present window) and in the third (where the present window as more or less central to the wider previous opening).



When the nave wall above the north arcade was partially stripped of plaster fragmentary remains of wall paintings – texts in black letter – were uncovered (left), and thought to be of early post-medieval date. It is understood that similar remains had been seen during mid 20th century works and deemed of little interest.

The four openings in the **South Aisle**, west window and doorway and two windows on the south, all have segmental-pointed rear arches with chamfers to the head only.

Within the **South Porch** the south door has a two-centred arch of two hollow-chamfered orders; the jambs are of the same section and have broach stops at their bases above a chamfered plinth, and the impost, grooved and chamfered below, carry a moulded hood.

⁷ Davison's 1826 drawing shows three square-headed clerestory windows here, but their spacing – one near the west end and two closer together towards the east - does not tally with the evidence seen.

There is a short length of moulded cornice above the doorway. The outer arch of the porch has a chamfered rear arch.

In the **North Aisle** the three windows have segmental-pointed rear arches and the west doorway a segmental one, all with chamfers only to their heads.

In the **South Transept** the window in the south wall has an irregular pointed rear arch and that in the east wall a roughly semicircular one, both without any exposed dressings. A panelled dado conceals the lower parts of the walls. In the North Transept the window in the north wall has a rough pointed rear arch, again without exposed dressings. On the east of the transept is a late-19th century arch to the Organ Chamber, segmental-pointed in form and of two chamfered orders with a hood chamfered on its lower angle, springing from semi-octagonal jambs with moulded bases and capitals; the southern capital has a line of small nail-head ornament.

The **Chancel** opens under a roughly two-centred arch of two chamfered orders, with a hood, chamfered on its lower angle, towards the nave only; it springs from semi-octagonal responds with moulded capitals similar to those of the south arcade; the base of the southern is concealed, and that of the northern badly hacked around. The three lancet windows on the south of the chancel have pointed rear arches without any exposed dressings; they have sloping sills, but the eastern has a level step against the inner face of the wall. At the east end of the wall, where one might expect a piscina, is a large mural monument dated 1725, in door-like architrave surround under an open pediment with a bust above.

At the west end of the north wall of the chancel is a large segmental-pointed arch of late-19th century date, of brown sandstone ashlar, to the Organ Chamber; this is of two chamfered orders, with a hoodmould, and springs from semi-octagonal responds with moulded capitals, the eastern the more elaborate. To the east is a shoulder-arched doorway to the vestry, with a large dog-tooth carved on the intrados of each shoulder, and then, on the north of the sanctuary, an old segmental-arched tomb recess (perhaps an Easter Sepulchre?) with a chamfer to its head; above is a recess formed by the internal splay of a former window with a shallow segmental-arched rear arch and jambs quite broadly splayed, like those of the earlier clerestorey windows; its exposed stonework is reddened, perhaps by the remains of an ochre pigment⁸. The east window has a pointed rear arch with a chamfer only to its head; the intrados of its arch has remains of 19th-century wall painting, now much decayed.

Inside the **Organ Chamber** the north window has a segmental-pointed rear arch with a chamfer to its head, and its internal sill lowered to form a seat. Boarded partitions divide the Organ Chamber from the **Vestry** to the east, and separate off entrance lobbies and a small office against the east wall of the vestry. Inside the vestry the doorways into the chancel and in the east wall both have chamfered square-headed surrounds with broach stops at the base of the jambs; the windows on the east and north have broad internal splays.

All the **Roof Structures** of the church were clearly of 19th-century date. The nave roof is of four bays (with trusses set against both end walls); the arch-braced collar-beam trusses spring from corbels set between the clerestory windows, and have upper king-posts; there is ashlaring

⁸ The 1832/3 plans show two windows of this type on each side of the chancel; they may have been inserted in the 1826 remodeling.

to the eaves, and one level of heavy purlins on each slope, as well as a ridge. Apart from the east end truss all this roof was renewed in 2006/7, closely following the design of its fire-damaged predecessor.

The aisles have panelled and boarded ceilings; that of the north has two principals with horizontal collars to posts set against the arcade wall. The south transept has a three-bay roof set north-south (despite the external slope of the parapets) with low-pitched cambered and moulded tie beams. The north transept has a boarded ceiling, set north-south, to a low pitch, with an odd horizontal section set at a slightly lower level along the west side. The south porch has a boarded wagon roof.

The chancel has a three-bay crown-post roof with arch braces springing from corbels, a moulded wall-plate, and braces springing from the crown posts to both collar purlin and collars.

Structural History

I An Anglo-Saxon Church?

There has been some debate as to which is the earliest part of the present building. The NCH account is somewhat ambiguous; at one point it states that the tower, which it places at c 1100 'is the oldest part of the present building' and at another 'the height of the nave points to a date earlier than that of the tower'. Pevsner et al (1994, 405) suggest that the south-east angle quoin of the nave 'may well be genuinely pre-Conquest'. Less equivocal evidence of pre-Conquest activity is provided by the piece of panel of interlace, of 10th or early 11th century date (pers.comm Professor.Richard Bailey) built into the external face of the south wall of the south aisle.

This is a difficult problem to resolve. The nave quoins, of which only the very angle are seen, are certainly megalithic blocks typical of pre-Conquest structures; however, large blocks of very similar type are used in the clasping buttresses of the tower, which is clearly early Norman work.

II The Early 12th Century. The Tower

Pevsner et al (op.cit) suggest that the tower dates from c 1123 when Henry I bestowed the church upon the Augustinian canons of Carlisle. One puzzling piece of evidence is seen in the construction of clasping buttresses at all four angles of the tower, as if this were being built as a free-standing structure. If this were so, the most likely scenario is that it was built immediately to the west of a pre-existing nave (which could then remain in full use during its construction), with the west wall of the old nave being demolished and the two structures linked up only after it was completed. The tower arch, usually wide and high for one of this date, is undoubtedly contemporary with the tower and certainly relates to a nave of the same width as at present. .

The tower itself, although showing some Pre-Conquest characteristics in its use of megalithic blocks – possibly re-used Roman material- is clearly of Norman date, and can probably be

ascribed to the first half of the 12th century.

III Mid-12th Century. The North Arcade and Chancel.

The addition of a north aisle to the nave appears to have taken place later in the 12th century; Morris (1916, 241) dates the north arcade to c1150 and both the NCH account and Pevsner et al (1992, 406) to c1175. The NCH sees the western part of the chancel as of 12th-century date, with the chamfered plinth of the eastern bay denoting a 13th century extension, but there has been so much rebuilding that no clear evidence survives.

IV 13th Century. The South Arcade and East Bay of the Chancel

All authorities see the south arcade and chancel arch as 13th-century work, and some imply that the chancel was completely rebuilt at this period. The chancel has been so much rebuilt in the 19th century as to make any accurate analysis of its structure difficult. Its general proportions are very typical of 13th century chancels in the area (eg Corbridge, Bywell St Peter, Ovingham etc) but apart from the paired buttresses at its east end it retains very little in the way of original features. The three lancet windows on the south, which most accounts imply are old features restored, seem more like 19th-century ones that re-use a little old stonework; Davison's 1826 print of the church (below) shows a quite different elevation with two broader square-headed windows and a priest's door between, without any intermediate buttresses. Morris (1916, 242) seems to imply that the windows in the east end of the chancel and the end gables of the transepts may be restorations of medieval features, but there seems no real evidence for this⁹

V 15th Century. The Transepts

The south transept (or more technically transeptal chapel, as its construction left the earlier arcade undisturbed) is generally thought of as a 15th-century addition; its only real dateable features are the diagonal buttresses at its southern angles, the arch which spans the aisle being too distorted and damaged to make any real comment on. The north transept may be of the same date, but seems to have been completely rebuilt except for some featureless masonry in its west wall.

The chancel may also have been altered in the later medieval period; the two windows in the south wall shown on the 1826 drawing, and that of which the rear arch still remains on the north, probably date from this time.

VI Possible later medieval changes

As often, 19th century restoration has erased evidence of later medieval and post-medieval changes to the building. Various structural changes are characteristic of Northumberland churches and the troubles associated with the Scottish wars; typical of these are the loss of aisles, and the conversion of towers into defensible retreats. At Newburn the north aisle seems

⁹The 1826 drawing shows an entirely different form of window in the south transept, with a very shallow segmental arch to its head.

to have been lost at some time; its arcade is late 12th century, but the present aisle walls are of 1832, when the church is said to have been extended. The tower has its first-floor doorway defended by a bar, which would make more sense if the tower itself were defensible, which could only be achieved by walling up the tower arch, as happened at Hartburn, Kirkwhelpington and Newbiggin. There is no clear evidence of this taking place at Newburn, although the 1832 plan shows that it was then intended to partially close the arch by a wall, perhaps replacing an earlier one. The surprisingly unworn state of the voussoirs of the arch (prior to the recent fire) might result from their having been encased in a later wall.

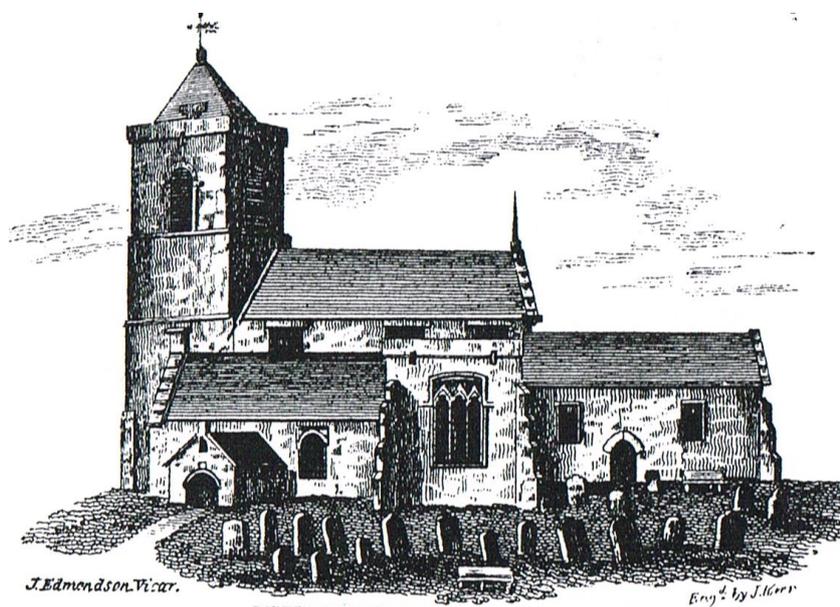
VII The Post-Medieval Centuries

As often, any evidence of structural changes to a church in the three centuries or so following the Reformation has been eased by zealous 19th-century improvements. It is recorded that during the battle of Newburn in the Civil War (24th August 1640) the Scottish Covenanters under General Leslie occupied the church and placed their cannon upon its tower. This episode does not appear to have left any structural evidence; it is known that the tower was re-roofed in 1735 (Gilhespy 4-5).

VII 19th Century. A Succession of Restorations

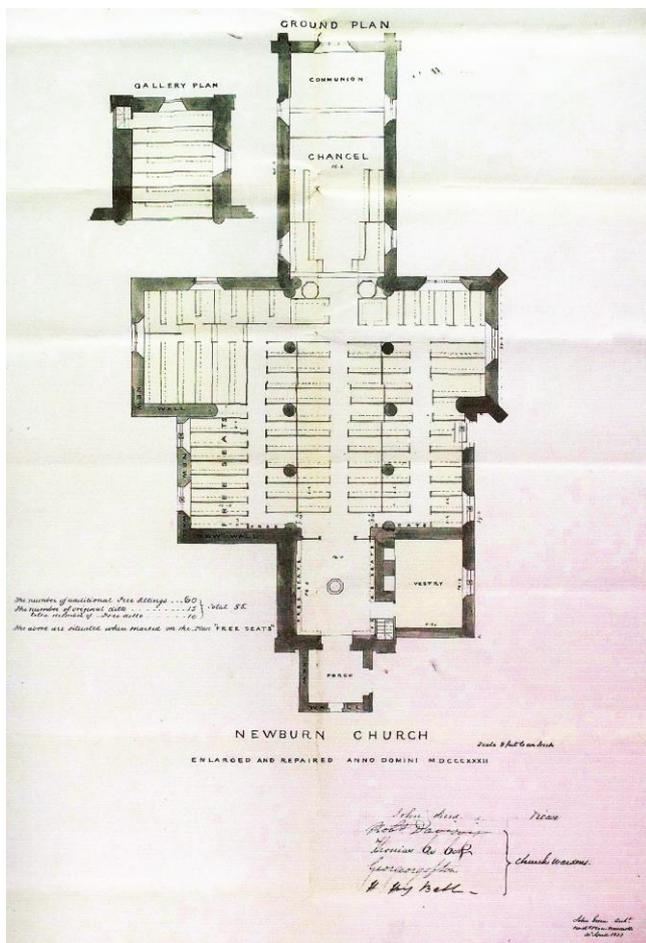
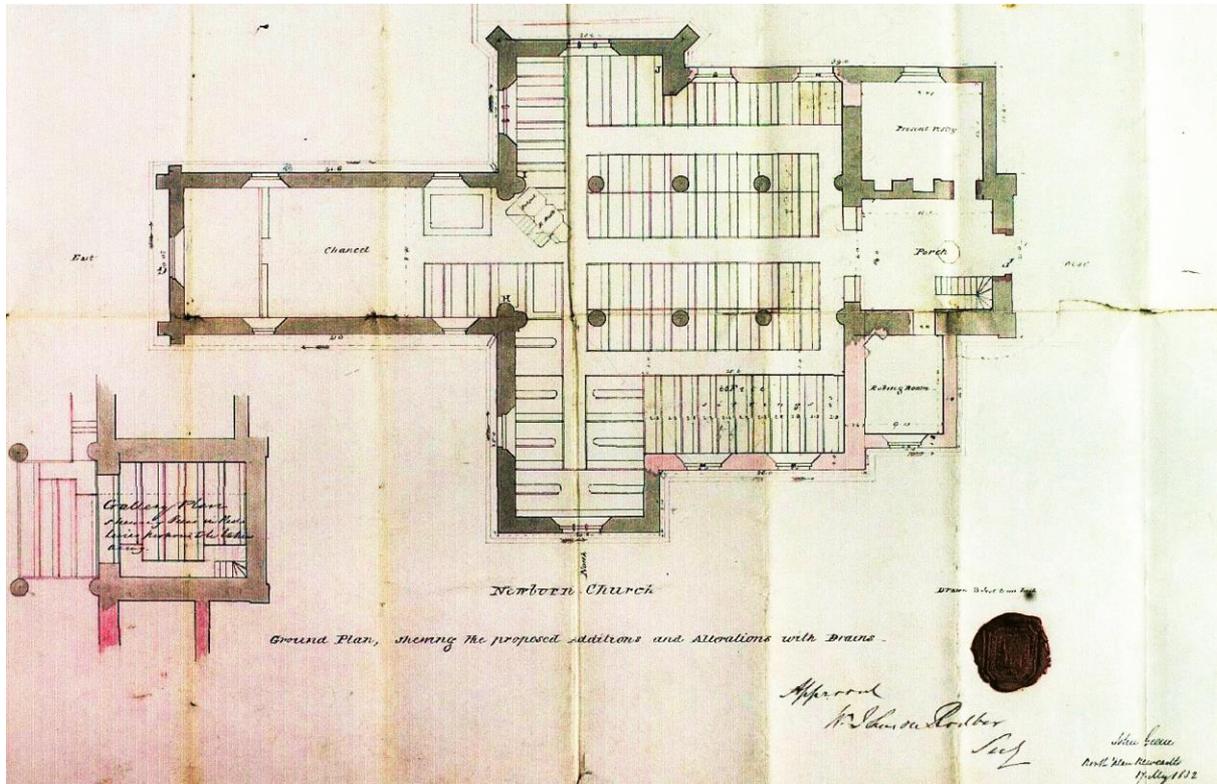
One antiquarian commented that ‘the building has undergone more than one “restoration”, and not to its advantage, due in some measure to more money having been spent on its decoration that is desirable in a church of its character’ (Trans Durham & Northumberland Archaeological & Architectural Society V (1896-9), xxvii).

Davison’s drawing of the church was made in 1826 (below) the year of the first restoration, but would appear to have been made before works commenced. In addition to the details of chancel and transept already mentioned, it seems to show the south aisle ending short of the tower. At the west end of its south wall is a porch with a niche above the outer arch, and to the east of it a single window apparently with a round arch within a square frame; the southern clerestory consists of three square-headed windows. In the same year Archdeacon Singleton in his Visitation found the church in a poor state: ‘The porch should be coped, and the disgraceful patchwork of red tiles on the roof should be replaced with grey slates’.



NEWBURN CHURCH.
North.^d

Published June 1826 by W. Davison, Alnwick.



1832 (above) and 1833 plans by John Green (Incorporated Church Building Society, 1832 plan showing proposed works in red (not fully carried out) and 1833 plan church after completion of works.

A) 1826-1827

A major restoration scheme was carried out in 1826-7 (Gilhespy, 9) which met with the Archdeacon's approval who wrote 'Newburn church, which had once been the worst in the diocese, was now the best'. (NCH 121). The works cost £1180 (Gilhespy, 8). The south aisle seems to have been partly rebuilt and extended west to flank the tower; its western bay formed a vestry and there was now no southern doorway or porch, so the west doorway of the tower must thus have become the entrance to the church. Green's 1832 plan shows it coloured as if a new feature (which it clearly is not) so it may have been re-opened at this time. The north transept was also virtually rebuilt, and the chancel completely remodelled; the windows of the south transept were recast.

(B) 1832

A further programme of works was carried out in 1832. Gilhsepy (9) records a restoration of the chancel at this time, after problems with dry rot, when an external perimeter drain was constructed and the body of the church enlarged so as to contain a further ninety seats; the total cost was £295. 1832 and 1833 plans of the church by the Newcastle architect John Green (p.23) show that the north aisle was rebuilt at this time (a proposed 'robing room' at its west end, flanking the tower, was not constructed) a west porch added to the tower, and a new stair created in the south-west angle of the tower.

Sir Stephen Glynne's account (reprinted in the Proceedings of the Society of Antiquaries of Newcastle 3rd series III, 1907-8, 227), describes the church in 1841, after these two early phases of restoration:

'The Church is cruciform and principally Norman and Early English, with some later portions. The Tower is at the West End, and entirely Norman, of 3 stages, with small round-headed windows in the two lowest. The belfry windows each have a semicircular arch divided into two smaller arches by a central shaft. The tower has a plain parapet without battlement. The Tower is engaged in the West End of the nave. The nave is divided from each aisle by four arches, those on the North are Norman and very plain, with circular columns having square capitals ornamented with a kind of foliage; on the S. The arches are pointed, the columns alternately circular and octagonal, one having the nail head moulding on its capital. The Clerestory is modern, with very poor windows. In the S. Aisle have lately been inserted some windows imitating early English, consisting each of two lancets within a pointed arch. In the S. Transept is a triple lancet within a general pointed arch: one nearly similar in the N. Transept, containing some stained glass executed by Wailes of Newcastle. The Chancel is large, its east window resembles those of the Transepts - some other windows of the Chancel are square headed, and the roof is cored. The Chancel being entirely open and fitted only with stalls has an extremely good effect, and the space enclosed by the altar rails is very large. The altar cloth and chair are handsome. The pews in the nave uniform and of dark colour varnished, which looks well. All the appointments of this church are in excellent taste, and the whole very well kept. The organ is placed within the tower, which opens to the nave by a plain semicircular arch. The Font is octagonal upon a circular shaft'.

An outline plan of the church at this period is provided by the 1st edition Ordnance Survey 25:1 mile map surveyed in 1858, which shows only the south aisle extended to flank the tower, and the 1832 west porch. Glynne's lack of mention of the lancets in the chancel, and his reference to square-headed windows, might also suggest that the chancel had not been remodelled by this date, but a pencil drawing of the church in 1844 found in an anonymous sketch book now in the Northumberland County Record Office at Gosforth Park (ref (D)ZAN M.13/E.16) (reproduced in the NCH account (1930, 127), where it is labelled as 'circa 1840') shows chancel and south transept as they are at present. So possibly Glynne's square-headed windows in the chancel were in the north wall, and he simply failed to mention what to him would have been very modern lancets on the south.

(C) 1870-1871

Restoration of chancel and nave at a cost of £954.12s6d (Gilhespy op.cit.); this is probably the same campaign of works, when the church was 'repaired and reseated' dated to 1872 by Kelly (1897, 191). It was probably at this time that the north aisle was extended west alongside the tower, to serve as a vestry. The structural repairs cost £964 12s 6d and the re-seating £346 10s 2d.

(D) 1885

Interior renovated with chancel screen and pulpit being installed, and a new organ chamber (and organ) provided at a cost of £2,700 (Kelly op.cit). Pevsner et al (1992, 406) give W.S.Hicks as the architect.

(E) 1888

The tower was restored (Kelly op.cit.); the mid-wall shafts and arched heads of the sub-lights may have been restored at this time; the 1844 drawing appears to show them as missing, at least on the south and east, although a sketch in the same book shows one belfry opening, probably the western, as intact.

(F) 1896

South Porch added, the architect being W.S. Hicks (Pevsner op cit.). The west window of the south aisle may be of the same period: a c1900 photograph of the church¹⁰ shows the west wall of the aisle without any window.

(G) 1898

'The reredos set up, chancel adorned with mural paintings, the floors paved with mosaic and marble and the church entirely reseated in oak' (Kelly 1902, 199-200). Hicks and Charlewood were the architects.

¹⁰ Newcastle City Library ref 26069

More recent changes have been more minor. In 1951 the North Transept was converted into a War Memorial Chapel. The majority of the 1898 paintings in the chancel were whitewashed over in the 1950s, leaving only the one on the wall above the chancel arch, which was destroyed in the recent fire but has been reinstated

Archaeological Assessment

This is an interesting church of some importance, but successive restorations have affected its character; some features which most antiquarian workers have seen as authentic restorations can now be shown to be 19th-century introductions.

The west tower is an important piece of early-12th century architecture, and the latest member of an important group of early towers that stretches up the Tyne Valley through Ovingham, Bywell and Corbridge to Warden. The addition of transepts is again part of a local tradition, of which Newburn again provides a late example.

Newburn is an unusually difficult church in which to assess the degree of survival of concealed features such as underfloor deposits, and wall plaster. There has been the usual underfloor heating system, which will have disturbed both structural remains and burials in its construction; its exact extent is difficult to assess, but it almost certainly extends throughout the church. Nevertheless, any works that entail the disturbance of floors should be accompanied by archaeological monitoring. Similarly any disturbance of wall plaster in the parts of the church that retain medieval fabric - the walls above the arcades, and in the chancel and south transept - should be monitored, and extensive works would be preceded by small-scale investigations of plaster. The fabric beneath will itself be of archaeological interest, and it is likely that there may be remains of earlier mural decoration; it is recorded that when old plaster was removed in the summer of 1951 'some painting and writings' were discovered on the north wall of the nave above the arcade; at the time they were deemed of 17th century date and 'poor specimens and not worth preserving' (Gilhespy 3) (these were seen again in 2006/7). One complicating factor here is the existence of a known scheme of mural decoration dating only from 1898., which was covered over in the 1950s. It seems highly likely that the remains of painting showing through around the east window belong to this late Victorian phase, although this should not be regarded as a certainty.

Outside the building there appears to be a drain around most of the walls which will have damaged, to some extent, archaeological deposits adjacent to the building.

The Cross Slabs

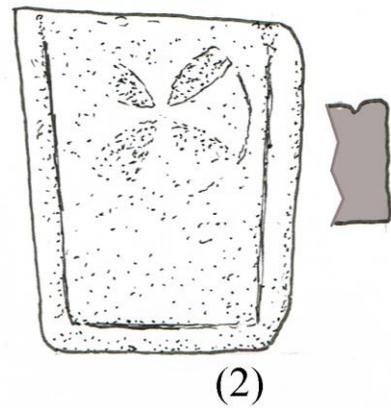
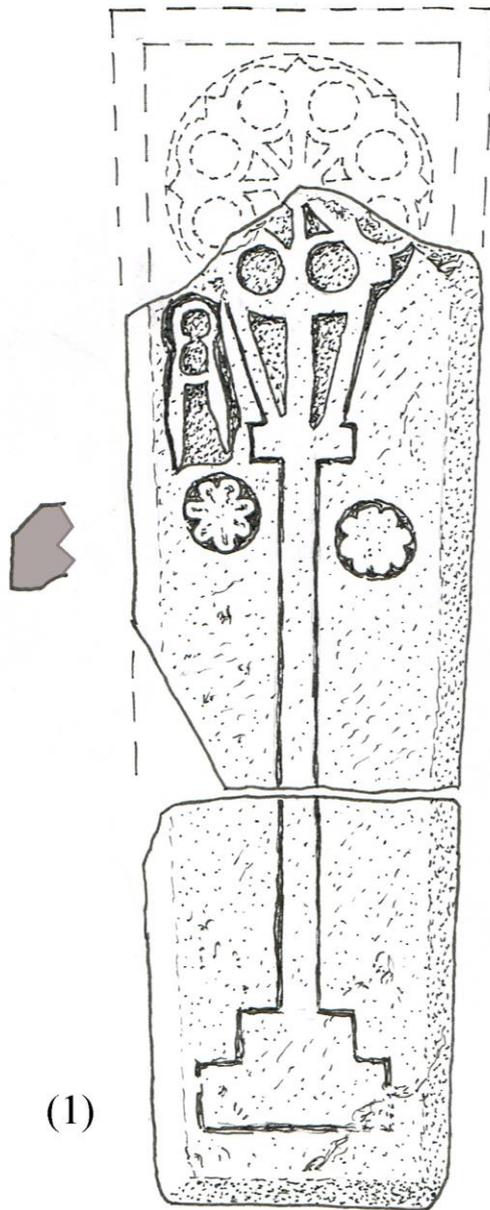
In 2006/7 three pieces of medieval cross slab grave cover were found re-used in the wall head of the tower; two of these (one re-used face-up on the north wall and one face-down on the west) fitted to make up the greater part of slab (1).

- (1) Slab of coarse-grained fawn sandstone, overall 1.54 m long, tapering from 0.55 to 0.45 m. Originally c 1.80 m long, it has lost a little more than half the cross head. The design is incised, except for sunk panels in and around the head; there is a marginal chamfer. The cross head, carved within a sunk circle, is made up of eight rings, with small triangular buds between, with a disc and radiating 'spokes' at the centre; a little below the head is a short cross-arm from which diagonal branches rise to support the head; on

the l. of these is a pair of shears (the conventional emblem of a woman), and lower down are two rosettes (that on the r. set slightly lower), the l. with seven petals and the r. with eight. The cross rises from a two-stepped base.

This is quite an elaborate cross; the fact that unbroken circles are used rather than the more common round-leaf bracelet motif probably indicates a fairly early date, probably in the later 12th century. It is almost certainly the work of the same mason as a slab at Ovingham, where the rosettes are placed directly below the cross head (which does not have the lower cross-bar and diagonal branches) and the emblem, only part of which remains, is again a pair of shears or possibly a key, another indicant of a female.

- (2) A small slab of whitish gritstone 0.62 long, and tapering from 0.145 to 0.37 m. It has an incised border line, and a very worn cross paté with sunk segments between the arms. The top of the slab seems to be missing – the border line seems to have continued further – so the question is as to whether this is a virtually complete stone (in which case it is of quite unusual form, a grave marker bearing a cross) or possibly part of a more normally-proportioned elongate slab, in which case the cross is unusually positioned, unless it had two crosses, towards head and foot, and we are looking at the lower one. Probably 12th century.



0 50 cm

Cross Slab Grave Covers
from tower parapet
Newburn Parish Church
2007

PFR

Acknowledgments

I should like to record my thanks to the Rev John Sinclair and members of his congregation, especially the churchwarden, John McGovan, for their friendly welcome and assistance with the preparation of this report, and to also Ms Valija Evalds of Yale University who both assisted in fieldwork and subsequent discussion.

The annotated drawings of the tower are all taken from originals prepared by Mackellar architecture.

Peter F Ryder July 2001/March 2015

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Appendix 1.

The West Tower of Newburn Church. A Provisional Structural Inventory (compiled after the 2006 fire)

General

The Tower is constructed of coursed roughly-squared greyish stone, with large sandstone blocks as dressings and in the shallow clasping buttresses at the angles. These rise to about two-thirds of the height of the tall lower stage, above which there are substantial alternating angle quoins. The two upper stages are divided by string courses, and topped by an oversailing parapet.

The only timber-work to survive within the tower (except for the occasional charred beam, see SI) is on the ground floor. Here the ceiling consists of nine square panels, framed by deeply-moulded beams and wall-plate; the corbels which support this wall-plate are individually referenced in the SI. The ceiling remains intact except at the south-west corner, where the ends of the wall-plates have been burned away above the winding shaft. The open-plan timber newel stair stands at the north-west corner (and is not included in the SI); an attractive late 19th century piece, this has survived except for damage to its upper rail. The walls of the ground floor are plastered and whitewashed, with a boarded dado on the eastern parts of the side walls.

A West Wall

- A1 Central blocked doorway, now containing a small window (A2). The jambs are made up of large roughly-tooled alternating blocks in jambs but the slightly-segmental arched head of much smaller voussoirs, neatly curved on both intrados and extrados. The blocking, of coursed stone, includes some pieces showing a tooled-and-margined finish characteristic of the late 18th or early 19th century; the door is shown open on plans of 1832 and 1833; it may have been re-opened at this time after having been blocked..
- A2 Small round-headed light within blocking of A1, with a chamfered surround, of 19th-century ashlar. The internal opening, behind plaster, is widely splayed and has a segmental head.
- A3 Horizontal groove cut into wall fabric c 15 cm above ground
- A4 Apparent short straight joint c 0.50 m from south end of wall
- A5 Corresponding apparent short joint c 0.50 m from north end of wall
- A6 Southern pilaster buttress; sloped tops
- A7 Northern pilaster buttress.
- A8 Low-pitched roof line, largely in cement, of western porch added 1832/3 and removed in later 19th century.
- A9 Window set centrally, to first stage. Squared blocks in jambs, one opposed pair of more elongate ones; perhaps an insertion. Head very roughly semicircular; monolithic lintel

now broken. Internally large alternating blocks in the jambs, cut voussoirs to head now badly damaged by the fire. Steeply-sloping sill.

- A10 Small window to second floor; little more than a slit and again perhaps an insertion, Head segmental, cut into single block. Internally the large blocks of the jambs are badly damaged, but the head, protected by adjacent beam A24, is in better condition. The rubble wall core is exposed in the splay between the cut dressings of inner and outer openings.
- A11 Eroded string course chamfered above and below
- A12 Smaller string course, probably chamfered below and square above, directly below belfry opening
- A13 Western belfry opening. The belfry openings are one of the most distinctive features of the Newburn tower. Each consists of two round-arched lights, set back within a semicircular arch, and carried on a mid-wall circular shaft with a moulded ring at top and bottom. Before the fire only the western retained its original shaft and base; here the base seems to be square at the bottom and octagonal above, although it is badly worn. The capital was a block chamfered on its lower angles, carrying an elongate slab, again chamfered on its lower edges, which in turn supports the arched heads of the lights. The heads were set back c 250-200mm from the outer arches, which are each formed by two parallel slabs, each c 250 mm thick, set on edge; the extrados of these slabs varied in form, sometimes being quite irregular, strengthening the impression that these may be re-used pieces, perhaps taken from some Roman structure. The outer imposts are slabs chamfered on their lower angle, which project slightly from the external wall face. The outer arches, again of plain square section, are mostly made up of five curved blocks, neatly curved on both intrados and extrados.. The shaft and heads of the lights have now been renewed, along with the imposts and sections of the jambs..
- A14 Oversailing chamfered course at base of parapet.
- A15 The parapet. On each side of the tower the parapet is made up of two courses, one low one and one of taller squared blocks, above which is a moulded ashlar coping that is probably of 19th-century date, its blocks held together with metal clamps.
- A16 Clock weight or winding shaft at the south-west corner of the ground floor of the tower, a rectangular wooden construction, with linenfold panelling (later `19th century?) on its east side. The north side destroyed by the fire.
- A17/18 Two quadrant-section corbels carrying the moulded wall plate of the ground-floor ceiling.
- A18/19 Two quadrant-plan corbels that carried the second floor, badly fire-damaged.
- A20 Just above A18/19, a narrow socket at the extreme south end of the wall.
- A21 A corresponding socket at the north end of the wall.

- A22/23 The ends of two east-west girders (which remain in position); for their east ends see D16 and D17.
- A24 Heavy beam, charred but still in position, adjacent to the wall face and resting on girders A22 and A23.
- A25 A second beam resting on top of A24, of lighter scantling and not quite spanning the full width of the tower, slightly recessed into the wall face.
- A26 Internal set-back, deeper here (10-15cm) than on the other sides of the tower.
- A27 End of an east-west beam, close to the south end of the wall, and a little above the level of the head of belfry opening A13.
- A28 End of a second beam at the same level, above the southern jamb of the belfry opening.
- A29 Set-back at the wall head, edged in part in brick.
- A30 Concrete step on internal face of parapet.

B South Wall

The lower part of the south side of the tower is concealed by the added aisle, except for the south face of the clasping pilaster buttress A6; the corresponding south-eastern buttress (B12) is not exposed externally.

- B1 Above aisle roof, window to second floor. Round-arched; sill and some jamb stones show a rough diagonal tooling. Head cut into soffit of single block. The rear arch is interesting, about two-thirds of it being made up of a single large curving block (now rather damaged by the fire), with three more conventional voussoirs to the west. There are some small sockets cut into this block.
- B2 String course (A11)
- B3 Blocked small opening, head formed by a piece of wood, with some bricks above and in sill, form the drive shaft of the clock. Internally this has a rather larger opening, with its lintel resting on top of set-back B31, and some brick in its sill. The opening, seems to expand within the wall (or is this a cavity left by the burning of a mid-wall timber lintel?).
- B4 Infilled larger hole below B3
- B5 Sawn off timber to right of B3
- B6 Rough socket to left of B3. B5 and B6, along with other small sockets, bolts and timbers in a ring around B3, relate to the fixing of the clock face (now removed) (see B44, B45)
- B7 String course noticeably slopes down from east to west

- B8 Belfry opening, with renewed base and shaft. Sill concrete. Arch six curved stones, Head of western of two lights cracked. Internally the rear part of the capital has been lost (before the fire) and a metal plate supports the inner faces of the rear pair of slabs into which the heads of the lights are cut. Shaft and heads of lights all now renewed.
- B9 Above extrados of outer arch is another curving block set parallel.
- B10 Oversailing course at base of parapet, much of it 'made up' with cement
- B11 Parapet; one fallen stone reveals brickwork on the inner face of parapet. Much of oversailing course made up in cement.
- B12 Clasping buttress at south-east angle of tower, now concealed externally by added aisle.
- B13 Arch between tower and west end of south aisle. Plain square-section semicircular arch on jambs of same section, with impostes chamfered below and grooved (copying those of adjacent tower arch), The dressings are all of diagonally-tooled sandstone ashlar, and look of 19th-century character, as with doorway C9 opposite.; the voussoirs are all through stones, extending the full width of the wall – whilst copying an early technique, perhaps necessitated by structural concerns,.. The doorway is of mid to late 19th century date; prior to this there was a cupboard (B48) in this position.
- B14/15 Quadrant-section corbels carrying the wall-plate of the ground-floor ceiling.
- B16 Blocked doorway at first-floor level, 1.2m wide, with its west jamb only 0.25 m from the south-west corner. The internal east jamb is set square to the wall, with quite a thick coat of plaster. Timber lintel; the position of the sill is not clear. The 1823 plan shows that this doorway was at the head of a steep square newel stair.
- B17-21 A line of bricked-in sockets a course below the second-floor corbels B22 and B23.
- B22/23 Quadrant-section corbels, damaged by the fire, that carried the second floor timbers.
- B24 End of beam D18, at extreme east end of wall.
- B25 End of beam at same level as D18.
- B26-28 Three small patches of brick at the level of the extrados of the internal head of window D1, the westernmost (B28) being directly above its centre.
- B29 Shallow socket directly above B28
- B30 The end of beam A24, at the extreme west end of the wall.
- B31 Internal set-back
- B32 Small socket at level of sill of belfry opening B8, at east end of wall

- B33 Quadrant-section corbel a short distance west of B32.
- B34 Similar corbel close to the west end of the wall.
- B35 Open socket c 10cm square, west of and a little above B34 , only c 0.3m from the south-west corner.
- B36 Bricked-in socket a little below the springing of the head of the belfry opening, directly above corbel B33.
- B37 Corresponding socket above B34.
- B38 Quite an extensive patch of brickwork above the head of belfry opening B8.
- B39 Horizontal timber above B38, just below the wall-head.
- B40 Charred stub of central north-south beam, on top of B39.
- B41 Wall-head set-back
- B42 Concrete step on inside face of parapet.
- B43 Socket for timber in B41, directly above B39.
- B44 In external face of wall, stub of timber, relating to fixing of clock face, c 1 m above B6.
- B45 In external face of wall, small sockets, relating to fixing of clock face, c 1 m above B5.
- B46 Former doorway at west end of south wall of tower at ground level, shown on 1832 and replaced by a timber newel stair on the 1823 plans. Now blocked and concealed behind plaster.
- B47 Square newel stair in south-west angle of tower, rising to gallery level, shown on 1833 plan. The stair (presumably of timber) seems to have been installed in 1832/3 although it is possible that the stair well was an older feature - the 1832 plan show some feature, perhaps a straight joint, immediately to the west of doorway B46 on the north face of the wall. The timber lintels at the head of the stair well were seen on both faces of the wall (see doorway B16); presumably the south side of the stair was no more than a lath-and-plaster partition.
- B48 Cupboard shown on the 1832/3 plans, in the centre of the north wall of what was then the vestry, and in the position now occupied by archway B13. The 1822 plan shows it as having a raised surround (unlike the adjacent cupboard B49); might it have been a doorway before the addition of the vestry in ?1826.
- B49 Cupboard shown on the 1832/3 plans, at the east end of the north wall of what was then the vestry; now concealed behind plaster
- B50 Row of six brick-infilled sockets above archway B13, presujmably for the roof timbers

of the 1826? vestry.

- B51 Socket, infilled with brick except for upper part, more or less central and just below ceiling of west bay of aisle.
- B52 Diagonal line running down from r., side of B51 to close to easternmost of B50 sockets.
- B53 Ghost of vertical line (partition?) above and l. of centre of archway B13.
- B54 Timber lintel? Directly above B51
- B55/6 Corbels carrying plate of south aisle roof.

C North Wall

- C1 North-eastern pilaster buttress; only its very top rises above the aisle roof; the top stone of the buttress has been partly cut away.
- C2 String course; very eroded. Drops down in level from east to west
- C3 Large metal plate directly above string; also visible internally
- C4 Second metal plate c 1 m above string, east end returns downward.. Also visible internally.
- C5 Upper string course noticeable slopes down from east to west; badly eroded, at least one block looks as if there has been some sort of ornament, with bosses interrupting the chamfer.
- C6 Northern belfry opening renewed base and shaft and capital. Five thin flagstones make up sill. Internal jambs and head damaged; inner part of capital and block above gone, leaving inner slabs of heads of lights hanging in mid air. Shaft and outer heads of lights renewed.
- C7 Oversailing course, cut into for drainpipe at west end.
- C8 Parapet
- C9 Doorway from west end of north aisle into tower. Towards aisle this has a two-centred arch with a hollow chamfer, broken by imposts, chamfered beneath, which link to a hoodmould/label that is chamfered on its lower angle. The doorway is rebated, and its inner jambs cut square with the wall; the rear arch has a segmental head (with a chamfer to the arch only). Diagonally-tooled ashlar dressings of 19th-century character. Attached to the external face of the wall around and above the head are several memorial tablets.
- C10/11 Quadrant-section corbels carrying the wall-plate of the ground floor ceiling.
- C12 Window from first floor of tower, now opening into the roof of the aisle. The outer

opening is square headed, with a square-section surround, and a slightly-projecting sill. The head looks to have been altered, being cut up into the soffit of the lintel; did it originally have an arched head of some type? The inner opening has a distorted semicircular head, and looks earlier; dressings damaged by the fire. Is this a 12th-century opening, of which the outer part has been enlarged in the 18th or 19th century?.

- C13 Brick-filled socket a little above the head of window C12, at the extreme east end of the wall (corresponding with B17 opposite)
- C14 Brick-filled socket a little to the west of C13, corresponding to B18 opposite.
- C15/16 Quadrant-section corbels, damaged, to carry the second-floor timbers.
- C17 At the same level as C15/16, a projection spanning the north-east corner of the tower, incorporating a metal plate; above the plate is loose stone and some brick, and a bulge in the wall face. This loose material was cleared in December 2006 and revealed a crudely-cut sub-circular opening into a cavity/flue beyond, which extended a short distance upwards (behind the 'bulge'), but rather further down; c 0.9 m below was the top of what looks like a vertical pipe c 250mm in diameter (throwing small stones in suggested that this was blocked c 1 m down). The north side of this cavity may be infill (see C 37). A flue seems to have continued up the internal angle of the tower above this feature – a c1900 photograph (Newcastle City Library ref 26069) shows a vertical pipe or chimney rising above the parapet at this point.
- C18 North end of beam A24, at extreme west end of wall.

- C19 Patch of cement marking position of beam a short distance east of C18.
- C20/21 'Ghosts' showing positions of former beams, resting on girders A22/D17 and A23/D16 rather than socketed into wall.
- C22 North end of beam D18 at extreme east end of wall.
- C23 Set-back
- C24/25 Two shallow recesses directly below set-back.
- C26 Quadrant-section corbel a little below level of sill of belfry opening C6, towards east end of wall.
- C27 Shallow socket at extreme east end of wall just above level of C26
- C28 Patch of brickwork perhaps marking corbel at same level as C26, towards west end of wall.
- C29 Smaller patch of brickwork directly above C28, and directly below metal plate C3.
- C30 Open socket c 10 cm square immediately to west of C28.
- C31 Bricked-in socket a little below level of springing of head of belfry opening, directly above C26.
- C32 Short length of horizontal timber just below wall head.
- C33 Stub of central north-south beam directly above C32 (corresponding to B39 on south)
- C34 Set-back at wall head.
- C35 At level of C34, metal tie set diagonally, panning north-east corner of tower.
- C36 Concrete step on internal face of parapet.
- C37 On the external face of the wall, just below the roof of the west end of the north aisle, and immediately to the east of the north-eastern angle buttress of the tower, is a raised block that stands proud of the wall plaster. This may relate to the flue associated with opening C17.
- C38 A vertical cut in the external face of the lower part of the wall, only 250 mm from the north-east clasping buttress; faced with bricks set on edge, it contains a brown earthenware pipe. At the bottom it drops behind the dado; at the top it links to feature C17 on the internal face of the wall.
- C39 A horizontal row of eight sockets, for a removed aisle ceiling, a little over 1 m above the top of doorway C9.

D East Wall.

- D1 The Tower Arch. A lofty semicircular arch, virtually the full width of the tower. Its

jambes are of plain square section, except for a broad chamfer towards the nave, rising to an ogee-like stop c 1 m above the floor. The imposts are large blocks, chamfered beneath, with a groove directly above the chamfer; on the west they seem to return into the side walls of the tower, perhaps implying that the arch was constructed first. The arch is of a single square order, and some of the voussoirs look surprisingly 'square', with a fresh diagonal tooling. There are no through stones. Towards the tower the upper parts of the jambes, imposts and arch itself are all badly burned and broken.

- D2 Above the arch a blocked square headed doorway 1.55 m high by 0.70 m wide, with heavy squarish blocks in its jambes, rebated internally with a socket 0.15 m deep in the south jamb and a cut for a drop bar? opposite. The rear arch has semicircular arch with neatly cut voussoirs. Its sill has been raised by three courses of brickwork, of no great age. The awkward relationship between the rebated doorway and the rear arch suggests that the former is secondary, although the voussoirs of the earlier rear arch are cut square with the wall, rather than splayed like those of the 12th-century windows, so there was probably a doorway here from the beginning. The blocking of the upper half of the opening looks more recent than that of the lower; a door pin on the south jamb and small loop on the north may relate to a hatch closing this reduced opening.
- D3 Directly above the lintel of D2 is a ragged opening c 0.6 m wide and 0.4 m high infilled with late 19th or 20th century brickwork.
- D4/5 On either side of D3 are a pair of rectangular metal plates, bolted onto the ends of tie-bars inserted to counter structural movement.
- D6 A small central socket, at the top of the surviving area of plaster.
- D7 A second socket c 30 cm above D6.
- D8 The roof tabling of the nave, cut on a series of rectangular blocks of pinkish sandstone, which look to have been inserted in the wall (perhaps in the 19th century). This stepped arrangement of overlapping blocks seems to have lent some stability to the all, but later movement has seen the fabric beneath drop away from them.
- D9 The lower string, which only seems to return for one block from each of the eastern angles of the tower; perhaps cut away when D8 was inserted.
- D10 The upper string, immediately below the belfry. As on the north some blocks seem to show evidence of bosses or some other decoration, but everything is very worn. The stones in the centre, beneath the belfry opening, project further than the others, but this might be the result of a repair.
- D11 The belfry opening, with a cemented sill, and renewed base and shaft. On the inner face the rear surface of the northern light has spalled away, and the internal jambes are quite badly damaged. Shaft and heads of lights renewed except for inner block of northern light.
- D12 Oversailing course at the base of the parapet
- D13 The parapet

- D14/15 Quadrant-section corbels, damaged, that carried the timbers of the second floor.
- D16 Narrow socket for a timber running on the internal face of the north wall, in this case cut into the masonry of projection C17.
- D17 Corresponding socket at the extreme south end of the wall.
- D18/19 The ends of two east-west girders (which remain in position); for their west ends see A22 and A23. 180mm deep
- D20 A heavy charred beam that remains in position, running alongside the wall face and resting on girders D18 and D19. 350 mm deep
- D21 Directly above beam D20, a shallow chase in the wall face for a second beam that has now gone, which did not extend for quite the full width of the tower. 220 mm deep
- D22 Above D21, the shape of an A-frame, part of the former bell frames, is roughly cut into the wall face.
- D23 To the south of D21, a bricked-in socket.
- D24 Set-back, 1 m above D21, which dies out towards the south-east corner.
- D25 Possible cut out for beam immediately below the base of the southern jamb of belfry opening D11
- D26 A similar socket, infilled with brickwork, at the same level, about half way between the north jamb of D 11 and the north end of the wall.
- D27 The end of a surviving charred beam a little above the head of belfry opening D11, and close to the south end of the wall.,
- D28 The end of a surviving charred beam at the same level as D27, and above the south jamb of the belfry opening D11.
- D29 Set-back at the wall head, partly edged in brick
- D30 Concrete step on internal face of parapet.
- D31 On external face of east wall, on either side of blocked doorway S2; possible roof-line, cut groove infilled with small rubble.
- D32 At north end of D31, rough socket 0.53 m from internal face north wall nave, and c 0.30 m wide.