# QUINQUENNIAL INSPECTION REPORT

# OF

# ST. MARY, BLACKHILLS ROAD, HORDEN, SR8 4LJ

**DIOCESE OF DURHAM, ARCHDEACONRY OF SUNDERLAND, DEANERY OF EASINGTON**

**INSPECTION OF CHURCHES MEASURE 1955**

**CARE OF CHURCHES & ECCLESIASTICAL JURISDICTION MEASURE 1991QUINQUENNIAL INSPECTION AND REPORT**

**DATE JULY 2021**

**David Beaumont BA (Hons) Grad Dip, RIBA, AABC**

BBA Beaumont Brown Architects LLP

**CONTENTS**

**REPORT ON THE 2020 QUINQUENNIAL INSPECTION**

## 1.0 INTRODUCTION

Beaumont Brown Architects LLP, The Old Brewery, Castle Eden, County Durham TS27 4SU
T. 01642 700803 E. enq@beaumontbrownarchitects.co.uk www.beaumontbrownarchitects.co.uk @dsbbba
Company Registration No. OC366225 | VAT No. 116 3832 28

Date of inspection and weather conditions: Thursday 2nd July 2020. Dry and bright.

Date of report: July 2021

Report prepared by: David S Beaumont RIBA AABC

## 2.0 LOCATION AND SITE

**Address:** St, Mary's, Blackhill Road, Horden, County Durham, SR8 4LJ

**Location:** The church is about half a mile from the sea within the former colliery village (once the largest pit in the county and also undersea).

It has housing to three sides and an open frontage to the south. The site is modest and the church covers half of it. The renovated Parish Hall forms the greater part of the north boundary.

**National Grid Reference:** NZ442411

## 3.0 CHURCH AND LISTING DESCRIPTION

**Description:**

Built in 1913. Artificial stone outer with dressings in brick inner face providing a striking contrast. Solid floors and open timber roof structure. Westmoreland slate pitched roof coverings and mineral felt to flat roofs.

**Listing Description:**

*NZ 44 SW HORDEN BLACKHILLS ROAD (North side)*

*2/22 Church of St. Mary the Virgin*

*Grade II*

*Parish church. 1913 by J.D. Potts and Son. Textured concrete blocks and graduated green slate roof.*

*Cruciform plan: aisleless nave with western narthex and flanking vestries; north and south transepts with crossing tower; chancel with south chapel and north organ chamber and vestry. Gothic style with lancets and Geometrical-tracery windows. Tall chamfered plinth; tall stepped buttresses with gablets divide recessed bays with eaves corbel tables.*

*5-bay nave has paired lancets; west end has single-storey narthex with 3 lancets, canted corners with pointed-arched doorways and gabled projecting vestries with paired 2-light windows; gabled twin bellcote.*

*2-bay transepts have clasping buttresses and paired 3-light windows with vesica above in gabled north and south faces; pointed- arched doorways to western returns.*

*Broad square crossing tower has 3 lancets to each face and buttressed bay divisions; pyramidal roof has slightly-swept corbelled eaves. 2-bay chancel has taller apsidal east end with buttressed bays, each with a single lancet, except for blank centre bay; elaborate Lombard frieze at eaves.*

*2-bay south chapel has paired lancets and a 2-light plate-tracery window to east return. 2-storey organ chamber has chimney on east gable and lower square vestry to east.*

*Roofs, of moderate pitch, have large shaped kneelers and coped gable parapets.*

*Interior has walls of red engineering brick with stone dressings; crossing tower supported on low, moulded pointed arches; large octagonal stone pulpit and font flanking west end of chancel; west end of each transept has glazed internal porch; panelled, slightly-pointed wagon roofs with exposed tie beams.*

*Listing NGR: NZ4421441110*

**Entry in 'Pevsner'- The Buildings of England, County Durham, 2021 by Martin Roberts**

St MARY 1911-13 by Joseph Potts and Son of Sunderland and Newcastle. Known in the county as the 'Pitman's Cathedral'. Walls of textured concrete blocks (as elsewhere in the village), Westmorland slate roof. Cruciform plan: aisles nave with W narthex and flanking vestries; transepts with crossing tower; apsidal chancel and S chapel and N organ chamber and vestry. Lancet and geometrical windows. Interior of red brick with stone dressings. REREDOS, lady Chapel. Angel by *Ralph Hedley*, formerly part of a lectern. – STAINED GLASS in the apse. Made by the local firm of *John Christopher Richardson*, but were they the designers?

Does Martin actually mean that it's the boundary walls that are the same as the church (which they are) or that really there are other examples of this cast stone in Horden?

## 4.0 PREVIOUS INSPECTIONS

This is the author's second inspection.

## 5.0 SCOPE OF REPORT

This report is made from a visual inspection from ground level. The inside of the boiler house was inspected. Belfry was not inspected. Drainage was inspected from ground level only. No testing of the drainage installation has been undertaken. The report is restricted to the general condition of the building and its defects.

## 6.0 REPORT SUMMARY

**Executive Summary:**

The design of shape of the church and architectural details has created long term maintenance issues. Access to high features such as the apse and tower roof is very difficult. The south side of the church even more so as the ground falls away.

There are many roof features that invite leakage if not fully maintained. Lead theft (sometimes in unobservable places) has exacerbated water ingress that is sometimes discovered too late to avoid damage to decorations and finishes.

Rainwater goods have constricted routes and there are parapet gutters that do not comply with modern standards.

The external walls are made in a pioneering artificial stone construction. It has detailing defects to it and there is pointing missing, often in difficult to access locations, again, leading to major water ingress and damage to decorations and finishes.

The PCC do attend to the rainwater and roofing repairs promptly and the majority of these repairs are complete. There are occasions (eg Tower) when works are not done so quickly when it is a long wait for a specialist steeplejack to come to do the work. And this is the major issue- affordable access to carry out any work at high level and so repair needs have to balance the cost of scaffold.

This is the time to understand how the building is constructed to know better how to go about stopping water ingress through the walls. Once that is done then a priority plan for the rest of the repairs can be put in place.

A preliminary enquiry to the Diocese revealed no records at Cuthbert House and they suggest a visit to Durham University Library, Palace Green, and then the County Record Office, County Hall.

**Structure:**

The building is a masonry construction with solid floors and open trussed roofs. It is traditional in most of the senses of the word, apart from the external walling is in cast stone. All of the building was built at the same time. Has the tower got a steel frame?

The church is built on a cut and fill site- the land slopes away to the south.

There is very little discernible movement inside the church the only evidence of structural movement is on the S side where the ground is falling away, at the S W vestry and the S E chapel, the vestry is the worst of the two where there is opening up of the jointing between the stonework, some of the stones themselves are cracked and there doesn't appear to be any other remedy other than to repoint them and then monitor possibly future cracking. There are open joints to the tower at the South East corner, adjoining the Lady Chapel where the arch has deflected slightly.

**Roofs:**

Ridged roofs with green Westmoreland slates to diminishing courses with concrete half round ridges. Water tables at gables. Flat roof areas in mineral felt.

The tower has mitred slate hips and some have come away in the past.

Since the last QI the roofs have received attention:

2013 clean out the belfry roof and roof repairs to gutters and slating above the organ.

2014 The north west hip slating was repaired using scaffold and some rw goods and flashings amended. During the inspection we saw plenty of evidence of open joints to the tower masonry. The worst that could be reached had some pointing added- but the access was limited by scaffold. Some tower glass broken.

2018 Architect visit to assess and marshall repair requirements. Quotations for tower repairs via scaffold found to be out of proportion. Alternative access sought.

2018 Autumn- Taylor Hastwell steeplejack hoping to attend to tower slate repairs. Promised a stonework report.

2020- Lead theft at both vestries: box outlets, valleys. Replaced in Masterform, lead alternative.

2020- Further left theft discovered from earlier theft at bellcote, n nave abutment, n nave buttress pediments

2020- Steeplejack comes to site for the tower repairs. Repaired the sw hip slating. Report after the repairs produced in September. The report noted missing or disrupted flashings (to be dealt with by Ferguson in late 2021 and remedial work to stonework (discussed in walls section below).

Following the round of repairs by David Ferguson Ltd he wrote in June 2021

*We are pleased to report that the roofs, gutters and downpipes are in fair condition for their age, having benefited from the recent maintenance works that you have instigated.*
*However the slating of the Nave, Tower and lower roofs is generally unchanged from when the Church was constructed, and therefore must be approaching the stage when renewal should be considered. The condition of the remaining leadwork and cast-iron downpipes is similar to this; the lead lining of the cornice guttering on the Nave, in particular, is still serviceable although its design and layout does not comply with current recommendations.*

2021- Planned work- Replacement of stolen lead flashing to the chancel ridge abutment to the tower. Along with replace lead flashings and slates at the chancel, organ chamber, Vestry roofs,

There is still development work to do to understand the wall construction and develop correct repair techniques.

It may well be that there is a major restoration project in 15- 20 years that encompasses the recovering of all of the high level roofs, replacing 'leadwork', repairs to the tower glazing and repointing of masonry, creation of access into tower roof attic, improved access externally for maintenance.

The flat roof to the sacristy, requires a longer term solution to pigeons, waterproofing and drainage. The bell installation has made access very difficult.

Removal of the organ is a good opportunity to assess the roof structure condition and carry out any repairs and refinements wanted.

**Rainwater Goods:**

The tower has traditional cast-iron half round gutters and original square downpipes. The tower pipes discharge awkwardly onto the nave and chancel roof and the suspicion is that they may be causing water ingress to the tower. The nw corner discharge has been modified with the remainder to do in time.

The gutters to the remainder of the church apart from the chancel parapet are lead lined stone projecting corbels. The lead is continuous in the corbels and as there is no room for expansion they will have cracked. The n is being completed and the s should follow.

The South side downpipes to not appear to discharge adequately into their gulleys and it is unknown if those gulleys lead to soakaways. The Lady chapel consistently blocks. Some gullies have lost their grids and the replacements that are plastic are loose. They should be fixed down permanently. Vegetation also needs to be cleared away from them.

David Ferguson will be assessing the whole system at his next visit.

**Walls:**

The solid wall construction is formed of a red engineering brick facing the interior and artificial stone outer. There is probably a cavity and the outer leaf rests on a bitumen damp proof layer. The inner arches and apse features are also in cast stone.

The artificial stone appears cement based with aggregate. It is eroding but the areas are modest. The major issue is open joints which need to be filled.

The thickness of the wall units seems quite large- perhaps 200mm, but in instances there is little mortar in the joint- sometimes only a depth of say 50mm. And that is dropping out in cases and leaving a very big slot for water penetration. A quick look into some open joints shows that some stones have flat sides as they abut each other- as you would expect, But others have shallow rebated faces meaning only a slim part abuts and can be pointed. In both of these instances the joint was hardly filled with mortar and so is letting water into the core.

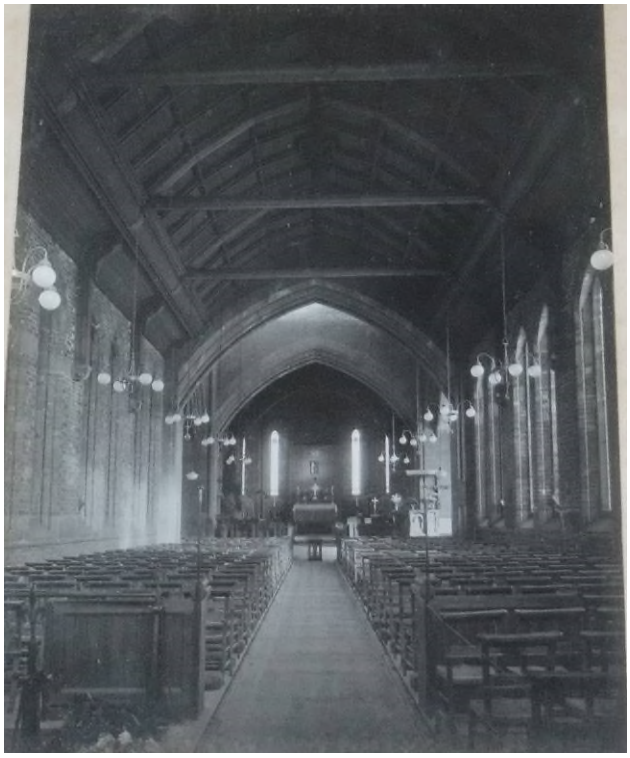
There is compelling evidence that this is exactly what is happening at sloping units at the tower, under the clerestory windows, where their cills are made of stacked sloping units and there is a major salting inside.

There's a question mark over how corners are formed - with an adequate bond or butted together? It also seems that the major pointing failure is on the sloping units and it may be these that need more attention than the general walling.

An investigation into the cast stone construction is recommended and this will help inform future repairs. There will also be a need to understand how to repair eroding stones or whether they are replaced and if so, with what.

The windows and door openings have cast stone dressings and they look to be the thickness of the wall, as there is salting showing at the junctions of the inner walling and dressing. It is possible the moisture is tracking right the way through the wall. The wall looks to be solid and thin at this point. Investigation of the wall construction at a window opening would also be worthwhile.

There is major staining at the tower crossing on the brickwork and cast stone and this has been there for some time. The undated image below doesn't show much at the crossing but there is salting to brickwork at high level at the n nave- maybe…



There are other churches in the region made of cast stone:

*St Joseph, Millfield, Sunderland, 1906-7 and St Mary Magdalen, Harbour Walk, Seaham 1906-7. Roman Catholic. Built to identical designs by Thomas Axtell of Ryhope (they both feature Italian Romanesque basilicas). These were the first churches in the world to be constructed of pre-cast concrete blocks.*

*The Sunderland and Seaham churches were built with an experimental process developed by Thomas Axtell, a founder of the Concrete Institute (1908). The following is from a contemporary newspaper account:*

By reason of the class of material used in its erection, it marks a new departure in the construction of ecclesiastical edifices. Instead of stone or bricks being utilised in its construction the church is built of concrete blocks. This is an American system and its adoption in the present instance is due to Mr Thos. Axtell . . . The first cement block EVER MADE IN THE WORLD FOR A CHURCH was made on Friday, 4th May, 1906 by the Rev. Rogers and Joseph Kinleside and is placed about the chancel arch.

*The Historic Churches Committee has recently approved the use of a water repellent treatment called Funcosil FC Historic for Seaham as there's a problem with penetrating damp. Apparently, too much water was used in the concrete, resulting in a porous structure that allows water to pass through.*

*Source; From Twitter discussions held between the author and the Committee-member of the Northern Architectural History Society & the Historic Churches Committee.*

The Funcosil will probably not be a remedy. It is the lack of sound pointing that is the issue at St Mary.

The church has a rapid ventilation system. It looks like it has an inner skin of 100mm brick and then a cavity of 150mm then there is a further brick face creating a lined flue. One would expect high level air bricks but none can be seen. Perhaps its purpose is to allow air in at low level and

use convection to let it rise in the nave and disperse through the glazing vents. The vents are rusted shut.

**Inside:**

The inside is in fair decorative order and it has the benefit of some very attractive fixtures and fittings.

The principal concern is the water penetration of masonry causing efflorescence and water marking to decoration and finishes. With some water staining to ceiling boarding. Once the external repairs are done then an internal restoration of the finishes could be carried out.

There are a couple of areas where the herringbone raised flooring is a bit loose, the yellow carpet is ok with some threadbare edges. Slight loose floorboard as you come towards the chapel outboard of the chancel arch. And there is there is a crack to the floor, left of the altar of the Lady Chapel.

The heating system is showing its age and thoughts are turning to a new system and quotations will be sought soon. There will be an opportunity here to consider the current seating arrangement and if there is an opportunity for reordering to create flexibility.

## 7.0 CONDITION AND RECOMMENDATIONS

*The following items are the observations made during the inspection. Below the item is a recommendation for work with a letter identifying its priority.*

*In section 8 the same priority items are re ordered into their priority categories.*

*A- Work requiring urgent attention, B- Within 1 year, C- Within 2 years, D- Within 5 Years, E- A possible improvement or item to note, M- Routine Maintenance or monitor/watching brief*

## 7.1 SERVICES

The log book was up to date and recorded the work done, including routine testing.

- **Water:** The water service arrives at the N W corner within the male vestry, this has come down from the Parish Hall. It subsequently serves the female choir vestry w.c. in the S W corner.

  **Recommendation:** None.

- **Foul drainage:** There is most likely a foul drainage system underground to the highway.

  **Recommendation:** None.

- **Surface water drainage:** It is assumed that there is a piped underground system, there are sufficient manholes to suggest this, though none have been lifted. In 2019 the N E corner associated with the basement drainage pipes were cleared.

  **Recommendation:** None.

**C** **Lightning conductor:** There is a terminal on the tower roof and this connects to a ridge conductor on the nave roof. There is a tape on the N side from the chimney stack and another at the N transept. Both are protected at low level with metal casings

though these were tampered with in 2020 and repaired. The last formal test was in 2018.

**Recommendation:** Carry out five yearly test and recommendations of the test report.

- **Electricity:** The supply is overhead and enters at the N E above the sacristy. The distribution board is located next to the organ with a further panel with fuses in the female choir vestry. Last tested in 2016 and passed.

  **Recommendation:** None.

- **Lighting:** The lamps to the fittings were replaced in 2016 with LED throughout.

  **Recommendation:** None.

**B** **Intruder Alarm:** Located in the female choir vestry.

**Recommendation:** Establish if this has been recently tested.

- **Sound system**: Comprises lapel, lectern, pulpits and handheld microphone, two speakers. There is a hearing loop.

  **Recommendation:** None.

- **PAT**: Last tested in March 2019.

  **Recommendation:** Annual test due.

**D** **Heating:** Gas fired Potterton Derwent HE installed in approximately 1998. A new pump installed at the same time.

The distribution is in four inch pipework to radiators in the chancel and nave which are understood to be in fair condition. There is leakage to the system but its location is unknown it may just simply be its age and there are thoughts to have a replacement heating system in the future.

Header tank is in the room over the sacristy. There was a new gas supply in 2001 and the meter is in the Parish Hall.

The system is checked annually in February.

**Recommendation:** Obtain quotations for a replacement heating system.

- **Gas meter**: Is located within the Parish Hall.

  **Recommendation:** None.

**B** **Bells:** There is a ring of eight Carillon bells, these were restored c. 1996. The Carillion is rung in the sacristy. The bells are on the outside of the building underneath a c2000 pitched roof underneath a covering with timber louvred sides. In June 1989 the bells were overhauled and returned. Lead stolen in 2011 and now lead alternative covered.

The creation of the pitched roof and enclosure has choked the space and pigeons have been getting in, these were removed and netting provided c. 2016. The space was not inspected during this inspection and is recommended that it is. The netting was only ever a temporary solution and there are concerns that pigeons may well be back in the space again. This is a long term problem in trying to achieve an effective remedy to exclude them.

**Recommendation:** inspect and formulate a long term plan to exclude pigeons and allow free drainage

**E** **Organ:** Pipe organ to the N side of the chancel, two manuals with blue painted organ case and silver pipes. Grade II on The National Pipe Organ Register. Harrison and Harrison describe it as installed on May 2 1913. It was built as a 'sister instrument' of the organ in the Church of St Hild and St Helen, Dawdon.

2019 visit and report by the DAC Organ Advisor Mr. Richard Hird recommends a complete overhaul. Harrison and Harrison have quoted 80k for the overhaul in their March 2020 report and quotation.

The church are currently building up funds for the repair works.

**Recommendation:** Carry out repairs when funds are available.

**M** **Rainwater goods:** There is no formal inspection in place and they are to be inspected.

**Recommendation:** Put into place a formal inspection routine.

## 7.2 GENERAL

- **Churchyard:** There is no churchyard associated with the church as it sits on a small plot. The grounds have never been used for burials and these contain shrubs and trees.

  **Recommendation:** None.

- **Trees:** There has been some thinning out of trees and shrubs to the site in 2018.

  **Recommendation:** None.

- **Access for the Disabled:** The PCC has a resolution in place which addresses the requirements of the Discrimination Against Disabled Act.

  **Recommendation:** None.

- **Wheelchair access:** There is a ramp from the highway to the porch where there is a step which is managed by a temporary metal ramp. From then on it is level through to the chancel steps.

  Buggies tend to be placed in the W porch.

  **Recommendation:** None.

- **Fire matters:** The PCC should carry out or arrange a Fire Risk Assessment in accordance with latest Regulatory Reform (Fire) Order 2006 (details available via the DAC, the local Fire Officer and/or the internet).

  Fire extinguishers noted:

  Female Vestry – 6ltr water

  Male Vestry – 6ltr water

  Nave West end – 9ltr water

  Basement – 6kg powder

  All tested in January annually.

  **Recommendation:** None.

- **H & S policy:** The PCC carry out an annual review of the policy.

  **Recommendation:** None.

- **Insurance:** The church is insured by the Ecclesiastical.

  **Recommendation:** None.

**E** **Asbestos:** Whilst there is no register it is understood that there might be in the organ blower.

**Recommendation:** The PCC to create an asbestos register outlining the presence (or not) of any asbestos within the building.

- **Bats:** None reported.

  **Recommendation:** None.

## 7.3 WORK SINCE LAST INSPECTION

**2014:** Repair to Roof & Rainwater Dispersal System.

**2016** Clean out of belfry roof, minor slating and flashing repairs at organ

**Summer 2016:** Complete replacement of lighting in nave, chancel, transepts and chapel, together with upgrade to gas and water bonds and new earth rod.

**January 2018:** Result of burglary – Replacement of CD player and relocation to position nearer organ.
Repair to nave window – 1 x Flemish 650 x 600, 9mm leaded square. Refix polycarbonate shield.

**August 2018:** Felling of sycamore to north of nave.
Clearance of scrub (especially self-seeded sycamore and ash) around ladies' vestry, to south of nave, and along west boundary.

**October 2018:** Water leak suspected between meter and church. Three pin-hole leaks located in original lead pipes, external to church: beneath path at north-west corner of men's vestry; beneath path at north-east corner of men's vestry; and

beneath path two metres east of bottom of steps to Centennial Centre.

**January 2019:** Water ingress in ladies' toilet. Temporary repair to gutter above. Further remedial works required by qualified contractor (see June-July 2020).

**November 2019:** Flooding in boiler house owing to blocked drain and inadequate covering of drain manhole cover east of boiler house, towards e boundary wall.
Drain cleared; manhole raised by new concrete frames; new manhole cover installed.

**February 2020:** Lead Theft – Repairs to valleys and slating on men's and ladies' vestries, plus replacement downpipe in north east corner of ladies' vestry and roof timbers under south east corner of men's vestry.

**June 2020:** Further repairs following lead theft: replace or redress flashings on north nave pediments, bell cote and west face of tower abutting nave on north side.
Lightning conductor adjusted. One down pipe installed. Also replaced gutters on outer faces of both vestries.

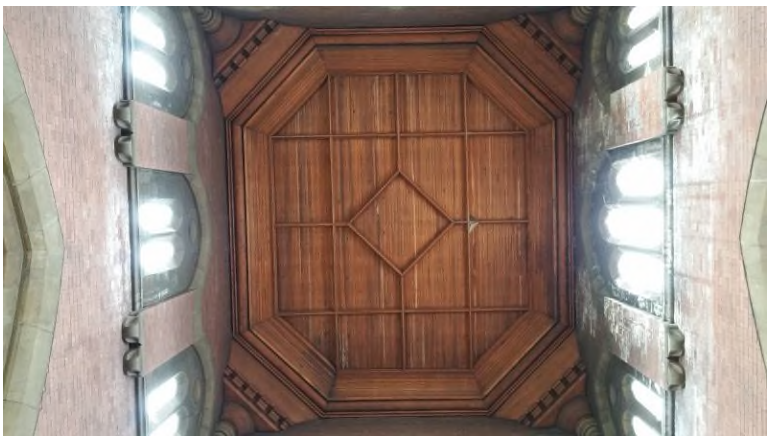
**2021:** Tower Roof: Replaced slipped slates, especially on south west hip; clearing of tower gutters by steeplejack.

## 7.4 FABRIC INSPECTION

### 7.4.1 TOWER

**TOWER INTERIOR**

**C**



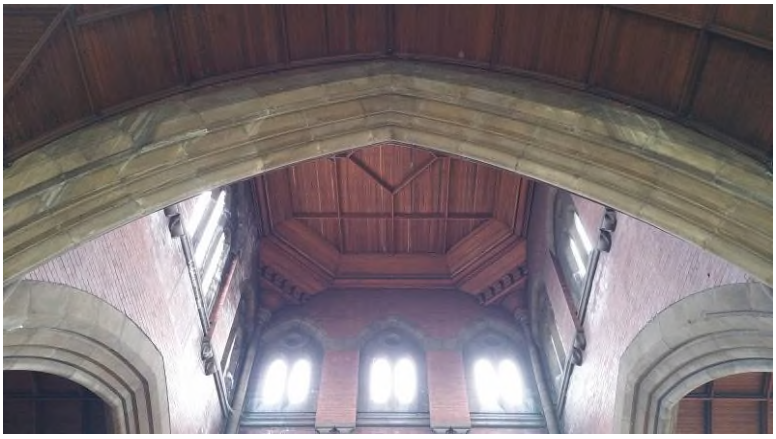
The ceiling looks to have some white marking within the centre square suggesting that there might be some water ingress there (it's not on the line of a hip). There is also another area on the N side in the N W corner of the octagon and there is also a cobwebby bit towards the E.

The ceiling is inset and forms an octagon which is supported by spandrel corbels all in timber and these in turn are connected to arch shafts.

The upper part of the tower has a clerestory arrangement of three double lights. The e has a central three light with doubles either side. Their concrete surrounds have white patches.

There is significant salting of the brickwork. There is a 'tide line' approximately twelve courses down on the E side. That is matched externally by the sloping clerestory cill units- suggesting that the sloping unit pointing has failed. And my guess is that the trapped water then goes into the corners and shows up on the columns. There's also water streaks that look to be from holes in the glass or cill.

Staining on the N side E corner, on the W side S corner and the S side E corner.



The arches are all sound, there is water staining at the springing points in all corners but less so in the N W corner, and down to the ground they are all ok.

Some quite big water staining of the chancel arch, it doesn't show on the others so there has been a big leak on the chancel arch and it looks to be both inboard and outboard of the arch so it could be both from the windows on the inside and then the roof flashing missing on the outside, and the outside pointing missing on the clerestory cills…

There's no ceiling hatch and when there is next scaffold inside one should be created. Or as an alternative, and perhaps more difficult, an external access via a roof hatch or perhaps a dormer feature- or modifying the east dormer?

**Recommendation:** create attic access, investigate wall construction, repoint exterior, repair glass, remove inside salts and staining

**TOWER EXTERIOR**

**C**

Hipped slated roof which has problems with its mitred hips occasionally and last repaired in 2020. It had its gold cross replaced 2013.

Taylor Hastwell Steeplejacks in their report of 2020, attached at the rear of this report, identify: cracks to the walling at the east; south east buttress has movement and cracks, failed cast stone unit, flashing dislodged and missing, patch pointing required.

Structurally, it seems fundamentally ok but there is water penetration. Thought to be principally through the sloping cill units where pointing has failed.

Not helped by the design of the back gutters of these corner clasp buttresses. They are in the process of all being modified as funds and access permit. The south side two are still to be done.

**Recommendation:** repair glass, repoint masonry, repair buttress back gutter drainage.

**Bellcote:**

No obvious defect.

**Recommendation:** none

## 7.4.2 ROOF COVERINGS

**B** **Roof General:**

Original Westmoreland slating on all of the hipped roofs with mineral felt on the flat roof.

The tower is a hipped structure with cut hips and this has been repaired by Andrew Gibson, there are a couple of slipped slates on the N side. The overall condition of the slating is good, there is the occasional lost slipped slate, and the mineral felt flat roofs are generally sound. It is the original slating and is likely to last a few more decades yet.

The flashing to the roofs are predominantly in lead though there has been significant theft over the time and these have been generally replace by Masterform lead alternative. There is one particularly troublesome area which is the back of the buttresses which project up on the nave on the N and S side that is being attended to as access and funds allow.

There is a round of flashing repairs (Those that are in the Taylor Hastwell report and other isolated items) which are planned to be carried out by Ferguson in 2021. The apse parapet gutters need a look over as there is possibly some salting below on the outside.

**Recommendation:** carry out leadwork repairs.

## 7.4.3 RAINWATER GOODS

**B** **General:**

The condition of the rainwater system is still as it was reported in the last QI.

There are specific defects to:

In the S E corner of the lady vestry the downpipes are quite a collection, there is a soil and vent pipe that is a bit wedged up with a stick in it that doesn't look very sensible.

The Lady Chapel gutter is blocked and overflowing.

There is grass growing in the high level gutters.

The bell chamber has pigeon muck around its perimeter.

The gully's have their grids missing in many cases.

The surface water drainage was attended too around the boiler corner in the last couple of years.

It is likely that David Ferguson will be employed for an annual clean-up of the guttering to be carried out in the summer, at that cleaning then an assessment of the gutter conditions will be carried out and a report produced to identify what the future repairs needs of the guttering system are likely to be.

**Recommendation:** carry out inspection and repair recommendations

## 7.4.4 WALLS

**WEST ELEVATION**

- **Nave and Porch:**

Gable and windows appear ok, below that is the entrance porch apart from the guttering with a bit of rust on it everything is reasonably tidy.

**Recommendation:** none

**C** **Female Vestry:**

Cracking underneath the window looks the same as the last QI. Stone still missing just by the flat roof. The most extreme S W corner is cracking like before. The biggest problem is pointing missing on the bottom plinth sloping face. Here the sloping face doesn't have the rebate that we have seen over in the Lady Chapel. So they are different shapes.

On the inner, outside corner there is further cracking showing on the plinth course just below the corner clasp buttress.

**Recommendation:** repoint plinth

**NORTH ELEVATION**

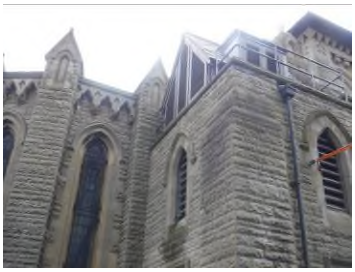
**C** **Apse:**

Looks much as it was on the last QI. We know there is some efflorescence showing on S side at high level so there might be a problem here with the parapet gutters.

The polycarbonate is broken to one of the windows.

**Recommendation:** repair window guarding

**C** **Vestry Corner:**

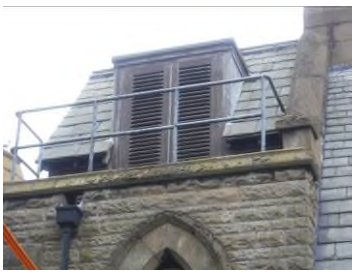


Basement boiler house (see separate entry below). Poor polycarbonate window protection that has been burnt in the past

covering one of the windows. Above that, another window with some wetting at the bottom of it- don't know why.

Pigeons in the belfry.

**Recommendation:** revisit belfry enclosure to improve drainage and provide bird exclusion, replace guarding



**B** **Organ Chamber:**

Grass growing in the gutters here, the organ has a blank wall and the plaster is cracking on it but not really needing attention yet. There is a bit of cracking just to the left of the downpipe linking the louvre window and the ground floor window. There is a slate missing above the organ as well.

**Recommendation:** replace missing slate

**C** **North Transept:**

Water table joints look a bit open on the E side, bit of a crack above the vesica window but the condition looks much as before, it has slightly grey polycarbonate on the windows.

**Recommendation:** repoint water table (ask Ferguson to look over when carrying out roof repairs)

**C** **Nave**:

The gutter here over sails with corbels so what created the (historic) staining inside on the eaves woodwork?

The polycarbonate has lost some of its jointing perhaps at high level just below the springing. Some graffiti.

**Recommendation:** renew polycarbonate jointing, remove graffiti

- **North Vestry:**

The polycarbonate has had some vandal attention. The roofs are just undergoing some repair here, and cast iron vent pipe is broken on the wc extension.

**Recommendation:** none

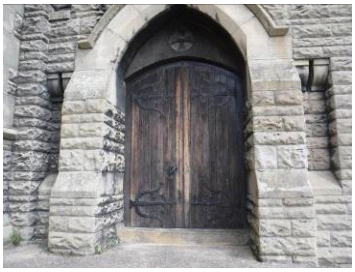
**SOUTH ELEVATION**

- Nave:

The S side of the nave looks generally ok, polycarbonate is clean on this side.

**Recommendation:** none

- **South Transept:**



Same design as the S with no obvious defects. Door decoration breaking down.

**Recommendation:** none

**C** **Lady Chapel:**

The downpipes block with regularity and wet the wall at the plinth. You can see here a good example of the observation that where ever there is a sloping surface the pointing is coming out.

Probably because of the shape of the faces that abut each other. They are rebated here but not for example at the Ladies' Vestry.

**Recommendation:** repoint plinth

## 7.4.5 EXTERNALS

**D** **General:** The boundary walling looks to be made in the same cast stone as the building.


The paths have been swept up at the foot of the nave on the N side and the gulleys cleared out, there has also been some drainage works done here. The paving is still uneven.

The south transept entrance steps are overgrown and there are bushes to clear away close to the S Vestry. The church have this in hand.

**Recommendation:** none

**D** **East Boundary:**

Rusty railings on the low cast stone walls. Further up is a masonry wall that is in fair condition.

**Recommendation:** redecorate railings

**D** **South Boundary:**

Low retaining wall (same cast stone as church) with metal railings rusting in places and the decoration is breaking down and some of the fixings are rusting and breaking the stonework.

The gate piers are bucking a bit and the gate has lost its keep, the hinges are also breaking the piers slightly.

**Recommendation:** restore railings and repair wall

**West Boundary:**

This is formed of fencing up against housing all looks ok.

**Recommendation:** none

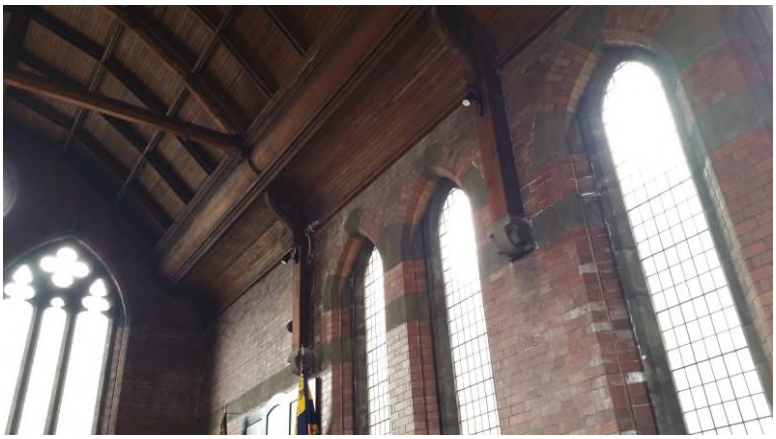
**North Boundary:**

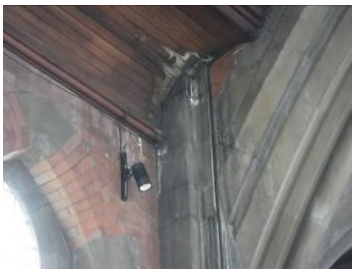
Has been recently rerendered and tidied up.

**Recommendation:** none

## 7.4.6 INTERIOR

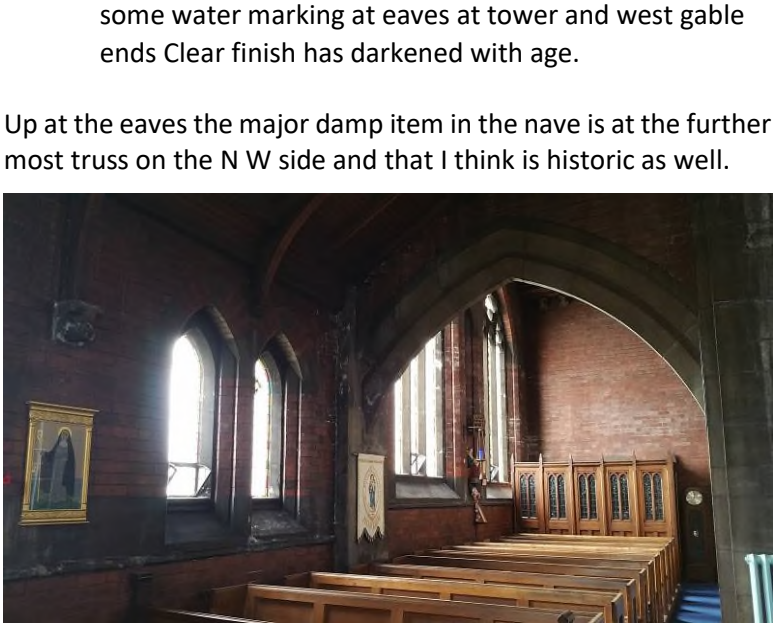
**C** **Nave:**

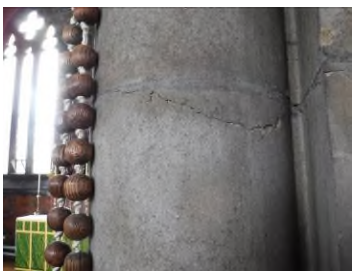




- **Ceiling –** open rafter roof, boarding is in good condition, some water marking at eaves at tower and west gable ends Clear finish has darkened with age.

Up at the eaves the major damp item in the nave is at the further most truss on the N W side and that I think is historic as well.





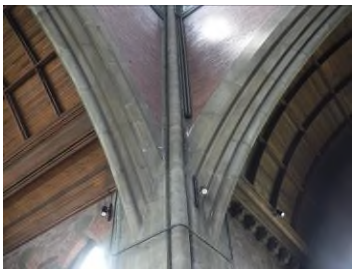
- **Walls –** Walls are fair faced engineering brick and look a severe compared to the lighter ‘stone’ colour of the outside.
- There is salts to them. Damp showing at low level particularly to the South side (oddly as it is higher out of the ground on the south).

- The window reveals are in cast stone, also has water staining and should be cleaned in the future. There is some need for repair but this is a low priority.
- The church has a bitumen damp proof course
  It is being compressed and droplets of bitumen are exuding from the joint. It is unknown if this continues the full width of the wall.
- **Floor –** The floors are generally concrete, with carpet to circulation spaces and woodblock floor under pews. The woodblock is loose and lifting, particularly at the choir stalls by the organ, where there are holes that need infilling.
- **Fixtures and Fittings –** Oak pews in reasonable condition on raised pew platforms.

Two Memorial boards at rear on the S side recording previous vicar's and churchwardens.

**Recommendation:** repair woodblock flooring

**E** **Tower Crossing:**

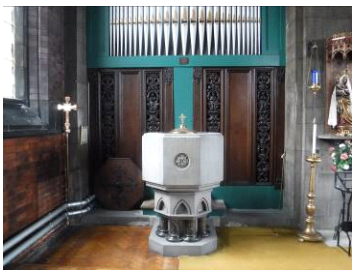


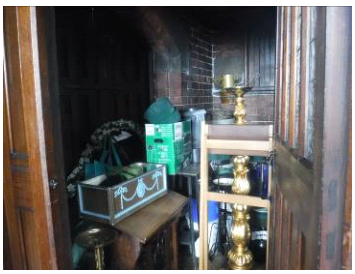
- **Ceiling –** At the tower crossing, the tower ceiling is timber boarded in an octagonal layout with corbels at the corners. The timber looks to be in good condition with no signs of decay or leaking. There is access above this ceiling via roof hatch on the E roof slope and it is not known if the void has been inspected in recent years. It would be worthwhile to do this when the tower roof covering repairs are carried out.

**Recommendation:** inspect void

**D** **Transepts:**

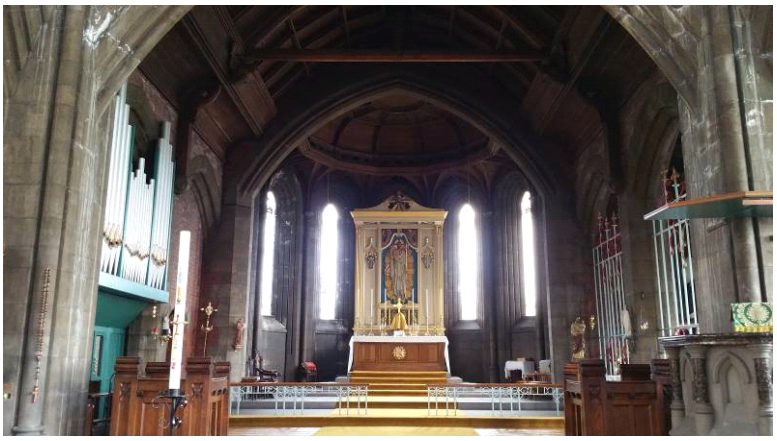
- **Ceiling -** The Transepts and Lady Chapel ceilings have exposed rafters and purlins with boarding and these appear to be in good condition.
- **Walls –** Same as the nave. Salts at the window reveals
- **Floors –** Same as the nave.
- **Doors –** The external doors to the transepts are no longer used for general access. They have been forced in the past by intruders and are now heavily guarded. They are draughty and could do with sealing better.
- **Windows –** The transept windows are in coloured glass and were restored in the last 10 years. Glass is protected externally by polycarbonate that is now showing its age. All the glass and guarding requires cleaning.
- **Fixtures and Fittings –** The pews have been removed, leaving a large open space at the S. There is a large stone font supported on a cluster of Frosterley marble shafts. Three steps up to copper lined font bowl. Separate wooden cover with metal straps.





**Recommendation:** improve draught stripping of doors

- **Chancel:**

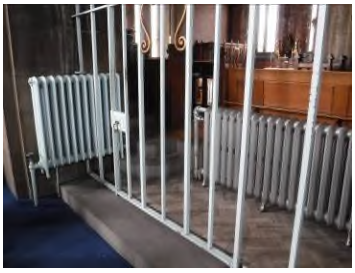


- **Ceiling –** Boarded and there is a void over that hasn't been inspected since 1993. The last QI identifies periodic leakages through this roof up to a time when the roof was recovered and that there were no reports of leakage since then. But there are some salts outside at high level so the parapet gutters need checking.
- **Walls –** Same as the nave. The cast stone elements have been treated with a wax finish and there is water staining to it.
- High level of salts on the N E corner reveal and there is also one area which has loss of facing.
- **Floor –** The chancel flooring is carpeted and covers what is thought to be a stone and marble floor. The high altar has a marble floor.

- **Fixtures and Fittings –** High altar with reredos, two sets of altar rails, large concrete pulpit with stone base and Frosterley marble dressings.

**Recommendation:** none

**D** **Lady Chapel:**

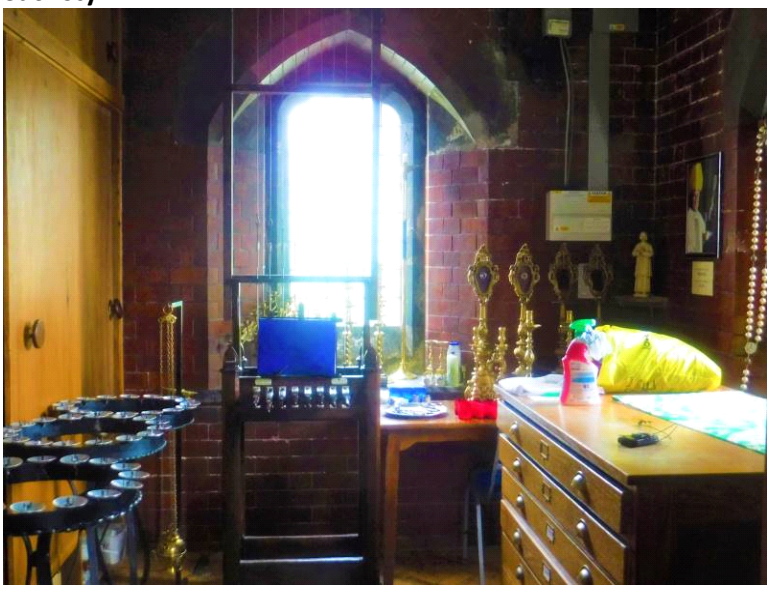


- **Ceiling –** exposed rafters and purlins with boarding and these appear to be in good condition.
- **Walls –** Same as the nave.
- **Floor –** crack to the floor, left of the altar of the Lady Chapel.

- **Fixtures and Fittings –** Metal decorative screen separating the chancel. Two stained oak baluster altar rails. Pews in good condition.

**Recommendation:** repair floor

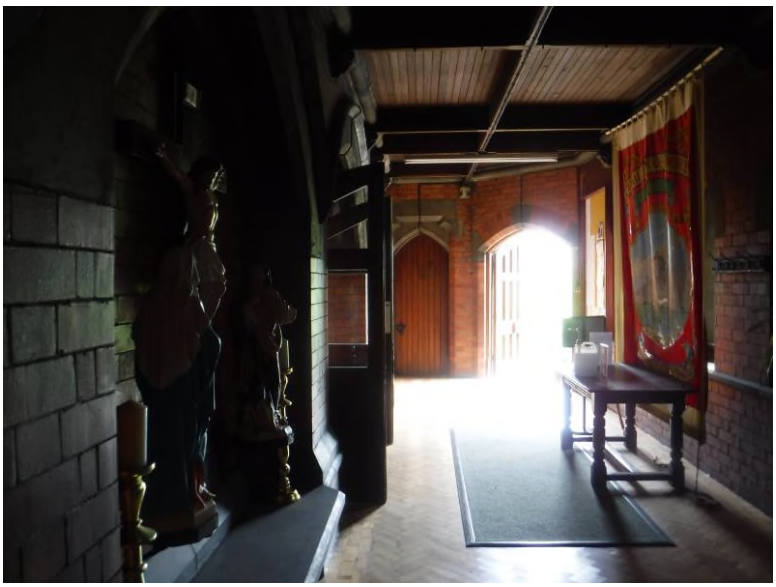
- **Sacristy:**



- **Ceiling –** ok
- **Walls –** Same as the nave.
- **Floor –**in good condition.
- **Fixtures and Fittings –** Contains built-in cupboards and vestment chests, wash basin with cold water supply, safe, amplifier and controls.

**Recommendation:** none

**D** **West Entrance Lobby:**



Bit of wear at the entrance double doors where the floor finish could do with a bit of a tidy up.

Crucifixion scene added into the entrance porch on the N side.

**Recommendation:** update floor finish

**E** **Male and Female Vestries and WCs:**

The general condition is fair but is marked by previous water leaks from lead theft and roof covering failure.

The church are considering their future use and might reconfigure the spaces.

**Recommendation:** update

**E** **Boiler room:**

- 
- **Ceiling -** Cracking to the concrete ceiling with some holes in it. But not troublesome.
- **Walls –** Painted brickwork, the paint is coming off.
- **Floor –** Concrete floor is ok.

- **General –** It's a little adhoc here with a poor external appearance and this is an invitation for intruders.

**Recommendation:** improve security

## 8.0 PRIORITIES

The following order of priority sets out the relative urgency of foreseeable repairs over the next 5 years. It is not a definitive programme of work and subject to funding, items further down the list could be brought forward if desired. They are priced individually but savings can be made by grouping the works and taking advantage of scaffold for other works. Scaffold costs are not included in the following costs.

There isn't an item for a whole church repoint- it really depends on what the research findings reveal. If one was wanted, then we suggest a budget figure of £50,000- 75,000. Scaffold could be a further £20,000 - 30,000. It could be broken into phases by doing the tower first.

| Priority | Location and Scope | £ |
|---|---|---|
| | **A - URGENT** -none | |
| | **B- WITHIN 1 YEAR** | |
| **B** | **Research:** Historical research to find original drawings, open up areas of walling to establish construction method and details. | **2,500** |
| **B** | **Organ roof**- inspect after organ removal | **250** |
| **B** | **Intruder Alarm:** Establish if this has been recently tested. | **-** |
| **B** | **Roof General:** carry out leadwork repairs. | **3,500** |
| **B** | **Rainwater Goods:** carry out inspection and repair recommendations | **C. 3,500- 7,500** |
| **B** | **Organ Chamber:** replace missing slate | **125** |
| | **C- WITHIN 2 YEARS** | |
| **C** | **Lightning conductor:** Carry out five yearly test and recommendations of the test report. | **-** |
| **C** | **Tower Inside:** create attic access, investigate wall construction, repoint exterior, repair glass, remove inside salts and staining | **7,500** |
| **C** | **Tower outside:** repair glass, repoint masonry, repair buttress back gutter drainage. | **12,000** |
| **C** | **Female Vestry:** repoint plinth | **1,000** |
| **C** | **Apse:** repair window guarding | **500** |

| | | |
|---|---|---|
| **C** | **Belfry:** revisit enclosure to improve drainage and provide bird exclusion, replace guarding | **3,500** |
| **C** | **North Transept:** repoint water table (ask Ferguson to look over when carrying out roof repairs) | **750** |
| **C** | **Nave**: renew polycarbonate jointing, remove graffiti | **1,500** |
| **C** | **Lady Chapel:** repoint plinth | **1,000** |
| **C** | **Nave:** repair woodblock flooring | **500** |

## D- WITHIN 5 YEARS

| | | |
|---|---|---|
| **D** | **Heating:** Obtain quotations for a replacement heating system. | **C. 50-75,000** |
| **D** | **Externals:** clear south vegetation | **-** |
| **D** | **East Boundary:** redecorate railings | **Inc below** |
| **D** | **South Boundary:** restore railings and repair wall | **7,500** |
| **D** | **Transepts:** improve draught stripping of doors | **250** |
| **D** | **Lady Chapel:** repair floor | **200** |
| **D** | **West Entrance Lobby:** update floor finish | **250** |

## E- IMPROVEMENT/ NOTE

| | | |
|---|---|---|
| **E** | **Organ:** Carry out repairs when funds are available. | **-** |
| **E** | **Asbestos:** The PCC to create an asbestos register outlining the presence (or not) of any asbestos within the building. | **-** |
| **E** | **Tower Crossing:** inspect void | **-** |
| **E** | **Male and Female Vestries and WCs:** update | **Budget figure-15,000** |
| **E** | **Boiler room:** improve security | **500** |
| **E** | **Windows:** ensure all vents are openable | **2,500** |

## M- MAINTENANCE/ MONITOR

| | | |
|---|---|---|
| **M** | **Rainwater goods:** Put into place a formal inspection routine. | **500** |

## APPENDICES

Church Plan

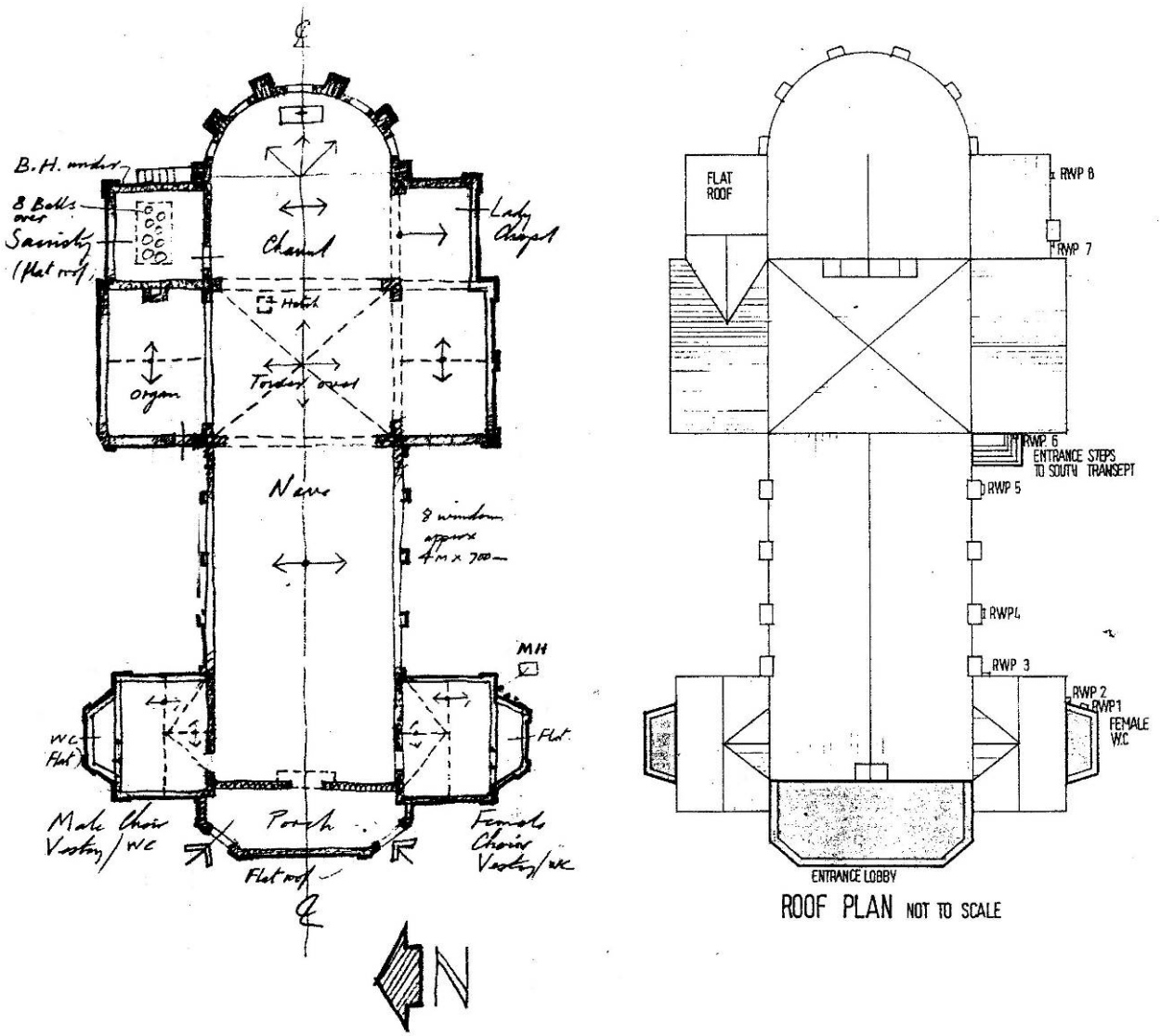
Satellite Plan

Taylor Hastwell Report

Explanatory Notes

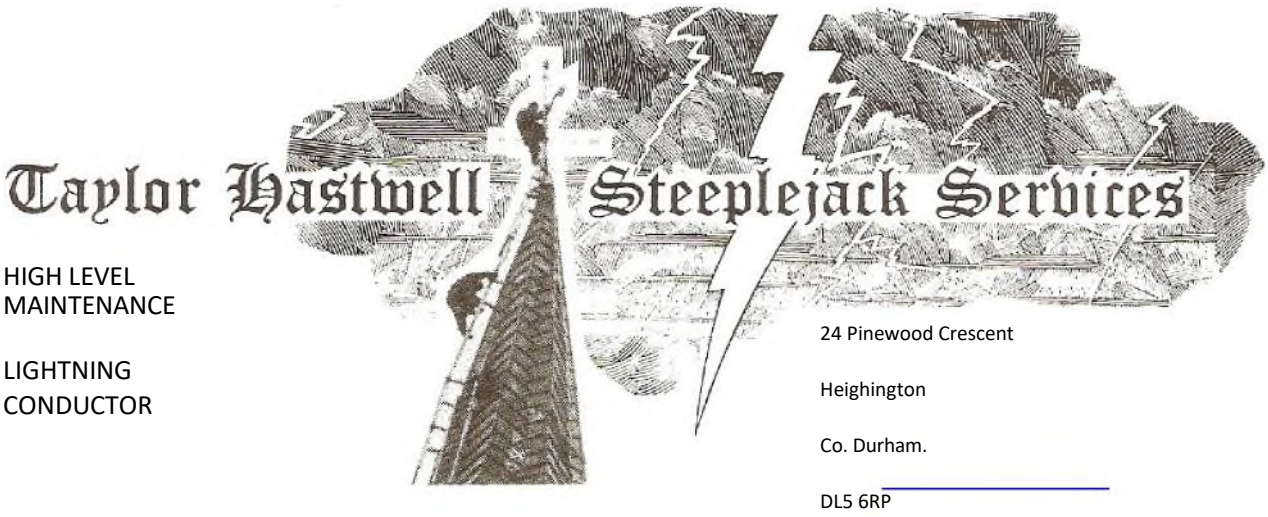
Guide to Routine Maintenance & Inspection of Church Property

**CHURCH PLAN**




*Plan from the previous inspector Jeremy Kendall RIB of HLB Architects.*


The Parish Church of
Saint Mary Horden
Blackhills Rd
Eighth St




HIGH LEVEL
MAINTENANCE

LIGHTNING
CONDUCTOR

24 Pinewood Crescent

Heighington

Co. Durham.

DL5 6RP

~~Mr. A. Usher~~
~~St. Johns College,~~
~~3 S Bailey~~
~~Durham~~
~~DH1 3RJ~~

18th September 2020.

~~St Johns College.~~
~~Tower Report.~~

Further to our recent visit, I am pleased to forward the report and recommendations. Example photographs are included in the appendices of this report.

1. General

1.1 Open joints are evident throughout.
1.2 Some light cracking is evident to a number of concrete blocks.
1.3 Most mortar joints to lead flashings are cracked and beginning to fail.
1.4 A large section of lead has been stolen from the East face of tower at ridge height.
1.5 A large section of flashing has been stolen from the ease face of tower.
1.6 A large crack is evident to the East face of tower.
1.7 The South buttress to the East face of tower has several large cracks with some movement evident.
1.8 A concrete block is failing to the East face of tower.
1.9 A section of flashing to tower top valley has failed (valley was cleared of debris during inspection).

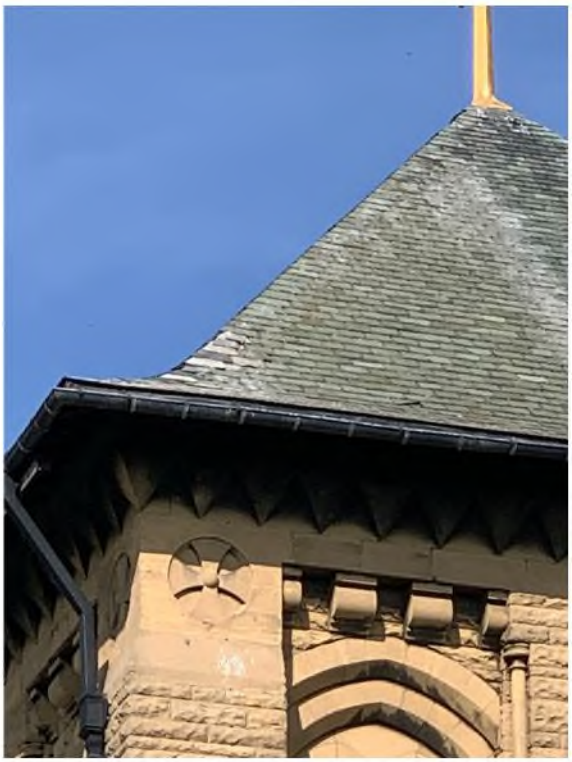
2. Recommendations

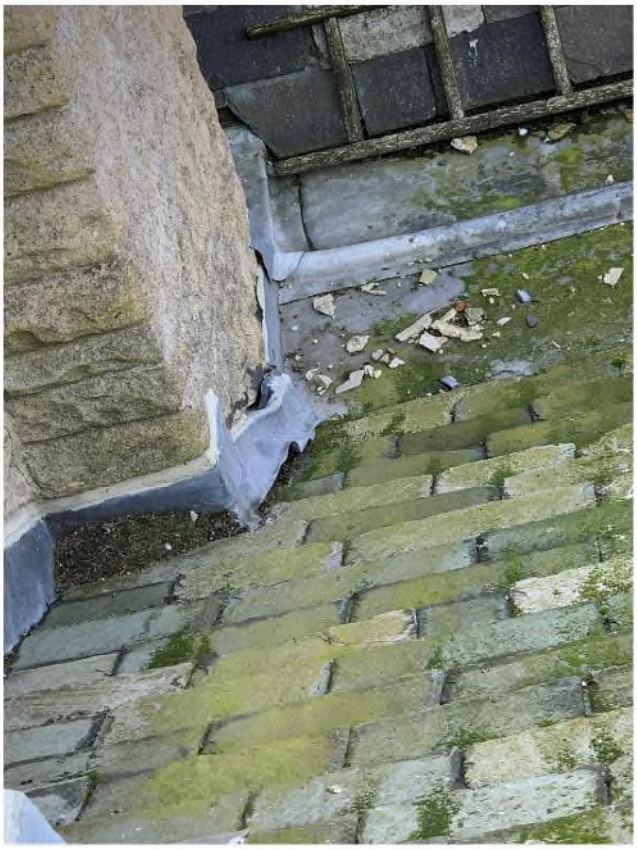
2.1 Patch point open joints as necessary.
2.2 Pin cracks to concrete blocks.
2.3 Cut out and repoint failing mortar joints to flashings.
2.4 Remove/replace, vandalized/stolen sections of lead.
2.5 Remove/replace, vandalized/stolen sections of lead flashing.
2.6 Fit Helibar to cracks in East face of tower.
2.7 Refit concrete block to East face.
2.4 Replace failed section of flashing to tower top valley.

Assuring you of my personal attention:

Yours faithfully,

A. P. Gibson.





## EXPLANATORY NOTES

A Any electrical installation should be tested at least every quinquennium by a registered NICEIC electrician, and a resistance and earth continuity test should be obtained on all circuits. The engineer's test report should be kept with the church log book. This present report is based upon a visual inspection of the main switchboard and of certain sections of the wiring selected at random, without the use of instruments.

B Any lightning conductor should be tested every quinquennium in accordance with the current British Standard by a competent engineer, and the record of the test results and conditions should be kept with the church log book.

C A proper examination and test should be made of the heating apparatus by a qualified engineer, each summer before the heating season begins.

D A minimum of 2 water type fire extinguishers (sited adjacent to each exit) should be provided plus additional special extinguishers for the organ and boiler house, as detailed below.

Large churches will require more extinguishers. As a general rule of thumb, one water extinguisher should be provided for every 250 square metres of floor area.

Summary:

| **Location** | **Type of Extinguisher** |
|---|---|
| General area | Water |
| Organ | $CO^2$ |
| Boiler House | |
| Solid fuel boiler | Water |
| Gas fired boiler | Dry powder |
| Oil fired boiler | Foam (or dry powder if electricity supply to boiler room cannot easily be isolated) |

All extinguishers should be inspected annually by a competent engineer to ensure they are in good working order.

Further advice can be obtained from the fire prevention officer of the local fire brigade and from your insurers.

E This is a summary report only, as it is required by the Inspection of Churches Measure; it is not a specification for the execution of the work and must not be used as such.

The professional advisor is willing to advise the PCC on implementing the recommendations and will if so requested prepare a specification, seek tenders and oversee the repairs.

F Although the measure requires the church to be inspected every 5 years, it should be realized that serious trouble may develop in between these surveys if minor defects are left unattended.

Churchwardens are required by the Care of Churches and Ecclesiastical Jurisdiction Measure 1991 to make an annual inspection of the fabric and furnishings of the church, and to prepare a report for consideration by the meeting of the PCC before the Annual Parochial Church Meeting. This then must be presented with any amendments made by the PCC, to the Annual Parochial Church Meeting. **The PCC are strongly advised to enter into contract with a local builder for the cleaning out of gutters and downpipes twice a year.**

Further guidance on the inspection and the statutory responsibilities are contained in *How to Look After Your Church. The Churchwarden's Year* gives general guidance on routine inspections and housekeeping, and general guidance on cleaning is given in *Handle with Prayer*, both published for the CCC by Church House Publishing.

G The PCC are reminded that insurance cover should be index-linked, so that adequate cover is maintained against inflation of building costs. Contact should be made with the insurance company to ensure that insurance cover is adequate.

H The repairs recommended in the report will (with the exception of some minor maintenance items) are subject to the faculty jurisdiction.

I Woodwork or other parts of the building that are covered, unexposed or inaccessible have not been inspected. The adviser cannot therefore report that any such part of the building is free from defect.

This appendix is based on *A Guide for the Quinquennial Inspection of Churches, Diocese of Birmingham 1993.*

## A GUIDE TO ROUTINE MAINTENANCE AND INSPECTION OF CHURCH PROPERTY

It is good practice for the PCC to appoint a fabric officer to take care of the routine maintenance of the church. This officer must report to the PCC and remain subject to its control and direction. The Care of Churches and Ecclesiastical Jurisdiction Measure 1991 requires the churchwardens to inspect the fabric of the church at least once a year, to produce a report on the fabric of the church and the articles belonging to it to the PCC, and to make that repot to the annual parochial church meeting on behalf of the PCC. The following list gives an indication of the time of year when certain jobs should be done. It is not exhaustive.

| | |
|---|---|
| Spring, early summer | Whenever necessary inspect gutters and roofs from ground level and inside especially when it is raining. |
| | Clear snow from vulnerable areas. |
| | Clear concealed valley gutters. |
| | Make full inspection of the church for annual meeting. |
| | Check church inventory and update log book. |
| | Check bird-proofing to meshed openings. |
| | Sweep out any high level spaces. Check for bats and report any finds to English Nature. |
| | Cut any ivy starting to grow up walls and poison. |
| | Spray around the base of the walls to discourage weed growth. |
| | Check heating apparatus and clean flues. |
| Summer | Arrange for routine service of heating equipment. |
| | Check interior between second week of April and second week of June for active beetle infestation and report findings to the professional adviser. |
| | Check all ventilators in the floor and elsewhere and clean out as necessary. |
| | Spring clean the church. |
| | Cut any church grass. |
| | Cut ivy growth and spray (again). |

| | |
|---|---|
| | Recheck heating installation before autumn and test run. |
| | Arrange for any external painting required. |
| Autumn | Check gutters, downpipes, gullies, roofs etc. after leaf fall. |
| | Rod out any drain runs to ensure water clears easily, especially under pavements. |
| | Inspect roofs with binoculars from ground level, counting number of slipped slates, etc. for repair. |
| | Clean rubbish from ventilation holes inside and out. |
| | Check heating installation, lagging to hot water pipes etc. and repair as necessary. |
| Winter | Check roof spaces and under floors for vermin and poison. |
| | Check under valley gutters after cold spells for signs of leaking roofs. |
| | Bleed radiators and undertake routine maintenance to heating systems. |
| | Check temperatures in different areas of the building to ensure even temperature throughout and note any discrepancies. |
| Annually | Arrange for servicing of fire extinguishers. |
| | Inspect abutting buildings to ensure there is no build-up of leaves or other debris against the walls. |
| | Check the condition of outside walls, windows, sash cords, steps and any other areas likely to be a hazard to people entering the building. |
| | Check the extent of any insurance cover and update as necessary. |
| Every 5 years | Arrange for testing of the electrical systems. |
| | Arrange for the testing of any lightning protection. |

It is vital, especially with older people, to keep them warm and well ventilated at all times. The fabric officer should ensure that such ventilation is taking place, especially after services.