Diocese of Durham

St. Bartholomew’s
THORNLEY (Tow Law)

Incumbent – Revd Jon Whalley

Inspection of Churches Measure 1955

ARCHITECT’S REPORT May 2019

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1.0 PREMISES IDENTIFICATION

Church: St. Bartholomew's, Thornley
Archdeaconry: Auckland
Diocese: Durham
Date of Inspection: 4th April 2019
Weather: Cold and overcast with occasional sunshine.

2.0 PARTICULARS OF SITE (Location, adjacent buildings etc.)

The site is a small enclosed church yard in the centre of a small agricultural hamlet of about 20 houses and a working farm, which is adjacent to the church on the south side.

3.0 PARTICULARS OF PREMISES (General Construction, layout etc.)

These consist of an aisleless nave with a chancel of similar length, a small south porch enclosed within the base of a short stone tower with a slated spire and a small pitched roof vestry on the north side of the nave opposite the entrance door.

4.0 REPAIR WORKS OR NEW WORKS SINCE LAST INSPECTION
(Date if known: 18th June 2013)

2014
June – Roof repairs including re-pointing to ridge – Allan Holmes - £150.00

August – Organ serviced and repaired – D. Tindale - £150.00

2015
March – Refixed guttering at N.W. end and refixed loose tiles at N.E. end following high winds – no cost.

2016
January – Replaced 4 No. wall lights in nave and spot lights to crossing and sanctuary with 10 watt LEDs - Jamie Stephenson, Electrical Contractor - £310.00

2017
March – Churchyard trees cut back and pruned by Local Authority.

August – Stone boundary wall repaired and north access gate replaced by Local Authority.

September - External Notice Board replaced - £930.00

Metal Handrails introduced at external entrance steps – James Godbold, Blacksmiths, Whitby £1,041.60

2018
June – Comprehensive pruning of churchyard trees – Local Authority responsibility

July – Internal lighting lamps replaced with higher output types – Jamie Stephenson - £535.00

July – Oct – Internal plastered wall and ceilings repaired and re-decorated – Colin Hopper, Decorator – £4,200.00

Oct – New carpeting throughout (except under nave pews) – Weardale Carpets - £1,400.00
5.0 SUMMARY OF GENERAL CONDITION OF BUILDINGS

The building continues to be generally in a good condition with minor defects and maintenance items regularly dealt with. Also within the quinquennium, considerable effort has been put into improving the condition and appearance of the interior with the comprehensive repair and redecoration of the plastered walls and ceilings which were extensively affected by penetrating dampness, and with the upgrading of internal lighting.

Externally, the extensive ivy growth on the north wall of the chancel has been cut back, which together with the clearing of other undergrowth and the pruning of the churchyard trees by the Local Authority has greatly improved the condition and appearance of the churchyard.

Outstanding defects and repairs are mostly of a minor or routine maintenance nature, except for the need for more extensive repair to the upper part of the tower and the base of the spire, together with the upper areas of the east gable.

6.0 DETAILED CONDITION OF BUILDINGS

EXTERNAL FABRIC

6.1 General Structure

The structure of the building is generally sound but there are slight movement cracks above 2 south windows of the nave with that to the left-hand window extending previously to the inside face now repaired. There are also slight cracks to the external stonework on the west side of the vestry on the line of the north gable which extend to the east side to the right of the round window and on the west gable on the line of the north west corner of the tower at high level.

None of these movement cracks appear to have worsened since the previous inspection, but except on the internal wall surfaces where comprehensive repairs were carried out in 2017, none of these cracks have been repointed.

6.2 External Wall Surfaces

These consist of squared, coursed rough dressed sandstone with dressed details. The external walling is generally sound except for various localised areas of lean, open or cracked or loose hard cement rich pointing as listed below.

6.2.1 North Elevations

Chancel
Generally sound but two thirds of the surface was covered with ivy and whilst this has now been cut off at ground level, the now dead ivy remains attached to the face of the wall and this area is still not fully visible, but as far as the stonework can be seen it does appear generally sound.

Nave
Generally sound but ivy now cut off at the ground level has spread from the east end up to the left side of the left-hand window. There are a few open joints adjacent to where the electrical supply cables are attached to the wall and the surface pointing is loose or falling off particularly under the line of the window cills and to the window jamb margins.

Vestry
Some eroded stones to lower part of chimney with soft or lean joints to the upper section of the gable and loose over pointing at low level where there are a few deeply eroded stones.

The stone coping at the lower end on the east side of the vestry gable is laminated.

There is an open joint developing to the left side of the old cellar doorway.
6.2.2 South Elevations

Tower
The base stone of the left-hand corner pinnacle has moved and could be loose and this should be checked and attended to as soon as possible.

Nave
This elevation is generally sound with some recent re-pointing with a cement based mortar. The area below the right hand window to the nave has been re-pointed with cement rich mortar adding to earlier cement rich mortar in a projecting type of pointing which may tend to trap any driving rainwater. There are slightly open joints to some of the corner quoins of the nave.

Chancel
There are areas of prominent raised cement rich pointing around the head of the central window to the chancel.

The stone coping to the chancel gable appears to be porous in sections with the stone at the mid point having laminated. The base stone of the chancel gable cross is cracked.

There are some open joints to the base of the right buttress to the chancel and open or cracked joints to the junction with the east corner buttress. There is evidence of water staining around the rain water downpipe in this location.

6.2.3 East Elevations

East Gable
This is generally sound with some more recent cement rich tuck pointing at high level which is missing or loose in places. The area below the east window is cleaner than the rest of the elevation. This is attributable to the existence of some earlier copper guards to the east window which have prevented the development of organic growth on the stonework. There is an area of open joints to the upper right corner where the section of outer facing stone appears to be loose and a disturbed area to the left outer top corner where the stone above the kneeler has moved with a deep open horizontal joint to the right of this. There are also open joints to the gable coping stones.

There are a few small open horizontal joints to both the left and right corner buttresses to the east gable.

The stone base of the chancel gable cross is cracked.

There is an area of lean pointing to the upper left-hand corner of the tower under the string course and to the upper section of the corner buttress. The stone finial on this corner is not vertical and should be checked for security.

6.2.4 West Elevations

These appear to be sound except for some slight cracking or opening of joints to upper left side of apex section of gable and cracked cement pointing towards the right hand side related to top and left margin movement of the building structure. The ground level is very much higher than the internal floor towards the north end and around the vestry extension.

The cement rich over-pointing is breaking off close to ground level to the west gable and lime over pointing breaking off close to ground level of vestry wall.

There is an area of lean pointing to the upper left corner of the tower, and to the upper part of the SE corner buttress of the tower.
6.3 **Roof Coverings**

These are of natural Welsh slate which are generally sound except as detailed below:

6.3.1 **North Elevation**

**Nave**
The covering seems complete except for some lifted and misplaced slate to the upper right end. There appears to be one slipped slate close to the upper centre of the roof.

The mortar ridge bedding has been repaired recently and appears sound.

**Chancel**
Generally sound except for back fall close to the east gable which may be contributing to dampness to internal gable head. The mortar bedding has been repointed recently and appears generally sound except for a few cracks.

**Vestry**
This is complete except for some chipped or broken slates where there is a temporary patching on the lower west side. The slating was noticeably wet on the west side adjacent to the nave wall.

The mortar ridge has been repaired recently and appears sound.

6.3.2 **South Elevation**

**Nave**
This is a little uneven towards the ridge but otherwise sound except for some unevenness at the eaves where there are chipped or wrong sized slates. The mortar bedding to the ridge is uneven but otherwise appears sound.

**Chancel**
This appears to be sound except for a few chipped or wrong sized slates and an uneven section of slates at the upper east corner. The mortar bedding to the ridge is uneven but otherwise appears sound.

**Ridge Tiles**
These appear to be of stone with the mortar bedding repaired recently.

**Spirelet**
This is slated in two sections. The top section appears reasonably sound and the lower section was repaired in 2004. The timber ventilators are damaged in places under the wire guards, particularly to the lower cills.

6.4 **Rainwater Disposal System**

These consist of half round cast iron, fibre cement or upvc gutters and round cast iron or upvc down-pipes. The rainwater goods appear to be complete and in sound condition except as follows:-

All down-pipes either discharge onto the adjacent ground or presumably into soakaways, and it is not possible to say whether these are adequate. The outlets to the vestry are discharging into a high ground level which is likely to affect the walls above floor level, but this situation has existed for a considerable time.

The valley gutter between the tower and nave roof had been repaired within the previous quinquennium before last but there has been previous water penetration in this area which could have been caused by the discharge from the tower where the outlet shoe has been missing from the down-comer in the past. This down-pipe has now been continued to the ground which should continue to alleviate the problem.

The spire also attracts nesting birds and their activities could lead to the gutter outlet becoming blocked. The adjacent belfry openings have been covered over with wire and this may discourage birds but the gutters should be cleared or checked at least twice a year.
There is evidence of blockage and/or overflow to the downpipe at the south-east corner of the chancel and to the gutter above the west slope of the vestry roof.

6.5 **External Windows & Doors**

External glazing: This is generally in good condition. The stained windows to the chancel are protected with wire guards which are beginning to rust to the east window and are loose to one side. Glass over-glazing to the west window has attracted a build up of dirt between the panes. The side windows are plain diamond quarries generally sound. The cellar door which has been recently uncovered from ivy growth is rotten at the foot and requires redecoration. The main entrance door is varnished hardwood in good condition.

6.6 **External Metalwork, Woodwork & Paintwork**

Cast iron rainwater goods – these are now limited but generally in need of cleaning and re-decoration. Paint covering of timber louvres to fleche is deteriorated. The belfry stone louvres appear sound.

6.7 **Tower, Spire, Bells & Frames**

(Date Bell(s) last serviced: Not known)

The tower could not be inspected at high level but appeared to be in reasonable condition with renewal of leadwork and the installation of wire bird guards. There is a single bell located in a small bellcote on the west gable. This is rung by a rope to the interior of the church, which was renewed about 20 years ago.

**INTERNAL FABRIC**

6.8 **Roof Structure**

Nave
4 No. king post timber trusses with purlins and rafters. Most of the structure is enclosed but it appears to be sound.

Chancel
4 No. "scissors" timber trusses with timber purlins and rafters exposed, appears sound.

6.9.1 **Internal Partitions**

There are none.

6.9.2 **Internal Ceilings**

Nave
Smooth plaster, recently redecorated and appears sound

Chancel
Dressed varnished timber, appears sound except for slight water or salt staining towards east end.

Vestry
Dressed varnished timber, slightly discoloured but appears sound.
6.9.3 Internal Walls

All the internal walls which have a plastered finish and which were in very poor condition due to surface dampness and cracking have been comprehensively repaired and redecorated using breathing renovating plaster and paint in 2018.

6.9.4 Internal Doors

"Grained" or varnished deal in reasonable condition.

6.10 Internal Decoration

This was comprehensively renewed following repair of the wall plaster in 2018.

6.11 Floors & Balconies

The floors are solid to walkways with natural stone flags which has been recently re-carpeted with the plain carpeting extended to the crossing and chancel. The original attractive handmade runners have been retained, cleaned and are used on special occasions. There are timber pew platforms in the nave and suspended timber floors to the choir stall areas. The sanctuary is inlaid with attractive coloured tiles. All areas appear sound, but due to high external ground levels and limited under floor ventilation the condition of covered timber joists must be suspect.

The sanctuary tiled floor has settled on the south side but is still safe and sound.

6.12 Glazing & Ventilation

All glazing is leaded, with clear glass lights to the side windows except for 2 in the sanctuary and the east and west windows which are stained. The windows were repaired or replaced around 1990 and are in good condition.

There are no opening vents but the building appears reasonably well ventilated.

The fabric tends to remain cold as the electric heating is only on when the building is in use.

6.13 FIXTURES & FITTINGS

6.13.1 Furniture & Fittings

The pews and choir stalls are of pitch pine. The altar rail is stone with Frosterley marble pillars. The altar is a simple oak table, normally covered. The lectern is a brass eagle. The font is a pedestal type made of Frosterley marble, which had previously been housed at St Mary’s Wolsingham and is believed to date from 1170 - 80. There is an attractive coloured tile backing to the altar.

The choir front rails are not fixed and can be easily moved. One has also suffered from woodworm infestation.

6.13.2 Organ and/or other musical instruments

Date of Last Service: August 2014

This is a small free standing one manual pipe instrument which was comprehensively re-built insitu by R. Lightbown in 2007. At the time of the inspection it was reported that the organ was exhibiting some problems and arrangements were to be made to have these looked at.

This organ is now listed in the British Institute of Organ Studies register of Historic Pipe Organs as being an instrument of national heritage and deserving careful preservation (June 2010).
6.14 **Monuments and/or peculiar features**

There is an oak War Memorial located in the north east corner of the nave and two wall memorials located in the chancel.

**SERVICES**

6.15 **Heating System**

(Date of last service: N.A. – see Electrical System item below)

This consists of floor mounted electric pew heaters sited under every pew all of which have been renewed in recent years.

6.16 **Electrical System**

(Date of last test: 5th June 2013 – Gary Brown Electrical 01388 764291)

This is a 3 Phase 500 volt supply. The electric heating is controlled by a time clock and linked to a "white" meter. The lighting installation was renewed in 1990 with all light fittings replaced in 2016 with LED lamps and is protected by miniature circuit breakers. Distribution is by metal conduit to the heating and MICC cable to the lighting.

The current operated trip switches to the lighting and heating circuits were operating at the time of the Quinquennial Inspection.

The meter was renewed in May 2012.

The last inspection found the installation to be good with all recommendations given in the previous inspection having been carried out.

6.17 **Lightning Conductor**

(Date of last test: 5th June 2013 – Gary Brown Electrical)

This consists of a single plaited copper down tape which was confirmed to be satisfactory at the last inspection.

6.18 **Fire Precautions**

(Date of last test of extinguishers: January 2019)

There is one 2 gallon water extinguisher, previously stored in the vestry which has not been tested and is now located with the other extinguishers.

There is also a 6 litre Foam and CO₂ extinguisher located adjacent to the entrance together with a fire blanket.

6.19 **Sanitary Facilities**

There are none.

6.20 **Disabled Persons Facilities**

There are four steps to the entrance and three steps to the chancel which were both provided with handrails in 2017. There is no specific area for the seating of persons in wheelchairs who would have to sit either at the back or the front of the nave.

There is no induction hearing loop but a portable P.A. system is used in the building on occasions.
6.21 **Security Situation**

There is only one external door which has a large rim lock. The church is overlooked on all sides and does not appear to have a security problem in this relatively isolated village.

6.22 **External Areas**

The churchyard consists of a small graveyard with standing headstones, a number of which are leaning. There are a number of large deciduous trees around the boundary which were having an adverse effect on the stone boundary wall on the south side but the local authority, who are responsible for the churchyard, carried out a comprehensive ground clearance and tree pruning exercise in 2017 and repaired all damaged walls. The notice board was renewed in 2017 and is attractive and in good condition.

6.23 **Areas not Inspected**

(This may not be an exhaustive list)

Underfloor voids
Roof voids
Upper tower and spire
Organ pipe-work
7.0 RECOMMENDATIONS

7.1 ITEMS REQUIRING ATTENTION IMMEDIATELY

External Wall Surfaces

Check stability of moved base stone to south-west corner pinnacle of tower and the south-east pinnacle of tower and reposition and secure if necessary.

Electrical Installation

The electrical installation should be tested in accordance with the IEE regulations and any recommendations made by the Inspector for repair, replacement or upgrade of the installation carried out. A copy of the Inspection Certificate should be kept with the Church Building Log Book.

Lightening Protection

The existing lightening protection installation should be tested for satisfactory earth continuity to satisfy BS EN 62305:2006 and made good or up-graded if necessary. A copy of the Inspection Certificate should be kept with the Church Log Book.

7.2 ITEMS TO BE ATTENDED TO WITHIN THE NEXT 12 - 24 MONTHS

External Wall Surfaces

- Repair, reposition and/or secure moved base stone to south-west corner pinnacle of tower and south-east pinnacle of tower if not done previously.
- Repair or rebuild disturbed stonework and repoint open joints to upper right and left corners of the east gable including repositioning moved stone above left-hand kneeler and repoint open joints to coping stones.

Roof Coverings and External Woodwork

- Replace slipped slate to centre of north Nave.
- Repair or replace damaged timber louvres to spire openings (This work could be done with item 7.1 above)
- Repair and redecorate cellar door.

Rainwater Goods

Check and clear out if necessary down-pipe to south-east corner of chancel and eaves gutter to the north-west corner of the nave.

Clean and re-decorate cast iron items.

External Windows

Re-fix and decorate wire guards to east window to control rusting and clean dirt from between overglazing and leaded lights to west window.

Note: This will require the temporary removal of the overglazing to the west window.

Furniture and Fittings

Permanently fix or provide stabilising feet to front timber rails in chancel.
7.3 **ITEMS TO BE ATTENDED TO WITHIN THE NEXT 5 – 10 YEARS**

**External Walling**

1) Re-point using Natural Hydraulic Lime mortar all open, loose or lean mortar joints listed in Section 6.2.

2) Renew laminated stone copings to vestry gable and porous stone coping to chancel gable.

3) Repair or replace cracked stone base to chancel gable cross.

4) Re-point open joints to parapet coping of tower. (Note: this work could be done with items listed in 7.1)

7.4 **DESIRABLE BUT NOT ESSENTIAL AT PRESENT**

**External Walling**

Carefully remove sound cement rich mortar as listed in Section 6.2 and replace with Natural Hydraulic Lime Mortar. This work could be included with item 1) in 7.3 above.

All other cracked or loose cement rich mortar should be removed and repointed as described in 7.3 above.

7.5 **ITEMS FOR FURTHER INVESTIGATION**

**General Structure**

Maintain regular (say twice per year) visual inspection of movement cracks listed in Section 6.1 and report any apparent **progressive** movement to the inspecting architect for further advice. Note: the repointing of open or cracked stonework joints will enable more certain on-going visual maintenance of historic movement cracks.

**Internal Floors**

Investigate condition of covered timber floor joists for excessive dampness or rot and treat or deal with accordingly, including providing adequate under-floor cross ventilation.

**Roof Coverings**

Check condition of slating and any lead soakers adjacent to east gable on north side to confirm rainwater is draining to gutter or lift and re-lay to correct fall. Note: this work could be included with roof covering repairs listed in 7.2 above.

**Furniture and Fittings**

Confirm that woodworm infestation to front rail in chancel is inactive or treat as required.
8.0 ESTIMATION OF COST OF REPAIRS AND OTHER WORKS

Notes:

To assist the Parish, the Diocese and potential funders, including English Heritage, the following approximation of costs is provided as a guide for budgeting purposes.

The costs are based on typical costs for the work described currently at the date of the report i.e. no allowance is made for any special arrangements which may be required or for the effect of inflation.

An allowance is made for Architects and any other relevant fees where these may be payable and for VAT.

Where work might be expected to be carried out by unskilled or voluntary labour, no allowance has been made except for materials.

8.1 Items requiring immediate attention

£1,000.00 - £2,000.00

8.2 Items to be attended within the next 12 – 24 months

£2,500.00 - £3,000.00 (includes high-level work allowed in 8.1 above)

8.3 Items to be attended within the next 5 – 10 years

£3,500.00 – £5,000.00

8.4 Items which are desirable

£1,000.00 - £1,500.00

8.5 Items for Further Investigation (which may require further work)

£250.00 - £500.00

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