# **Quinquennial Inspection Report**

Holy Trinity Church Swalwell, Tyne and Wear

Diocese – Durham Archdeaconry – Sunderland Deanery – Gateshead West



#### **Report prepared by:**

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# 1.0 Preliminary information

# 1.1 General condition

The church is generally in good condition externally and internally but there are some minor items of maintenance and repair required as detailed in the report.

### 1.2 Listing grade

The church is unlisted.

# 1.3 Brief history and description

In 1892 the Rev Canon H. B. Carr, rector of Whickham opened negotiations with Sir Henry A Clavering in order to purchase a small amount of land, including an existing building known as Claxton Hall, for the purpose of opening a small mission in Swalwell village. In 1893 Rev Carr left the property and land to a group of trustees with a view to building a new parish church. The new church was built, linked to Claxton Hall, which later became known locally as the Church Hall and on the 15th of December 1905 the church was consecrated. The first baptism took place later that month on the 21st, and the first marriage took place on the 22nd of February 1906. The church was originally joined to a row of houses, now demolished, leaving a gable end to the church on the west side.

In 1999 the former Hall and link were demolished. A vestry/servery, accessible toilet and passage with gallery over were formed within the west end of the church. In 2009 the worship area was re-ordered, pews were replaced with upholstered chairs and choir furnishings were removed.

Externally the church is constructed with a steeply pitched Welsh slated roof with a triple faceted apse at the east end. A bell turret with spirelet is located near the apse hip. It is roofed in cedar shingles, has an open timber structure housing the bell and has lead covered sides at its base. With the exception of the west gable wall, which is rendered, external walls are constructed in loadbearing yellow buff sandstone. These generally comprise rectangular stone blocks laid to courses apart from the middle section of the south wall (where the link to the Hall was previously located) where there is random rubble. Window and door dressings are in ashlar. The site falls a storey in height from south to north. Access to the church is via an external stone staircase on the north side leading to a small, enclosed porch. A boiler house is located below the porch.

The roof structure comprises simple trusses with steel tie rods and drop bars. Secondary trusses are without tie rods and drop bars. Nave and Chancel ceilings are boarded and painted. Purlins are exposed in the Nave and concealed in the Chancel. The external walls are plastered and painted down to approx. 1.5m above floor level from where they are panelled in timber. The floors are of suspended timber with t and g boarding. The floor is carpeted in the Chancel.

#### **1.4 Previous quinquennial inspections**

These were undertaken in 1968 by Cordingley & McIntyre, in 1972, 1988 and 1982 by H.H Atkinson, in 1987, 1992, 2000, 2006 and 2013 by Christopher Downs. Taken together the reports form a valuable record of the condition of the building and recommendations for its conservation and repair.

# 1.5 Work carried out since the previous report

1. A full re-wire of the church building was carried out in 2012. New light fittings installed with LED bulbs, along with the purchase and installation of a new digital TV and the provision of HDMI connections at the east and west of the building.

2. Polycarbonate window protection removed in 2013.

3. Wood from the redundant pulpit, lectern and ambo were used to create a modesty screen around the organist bench in 2013.

4. The interior of the building was fully re-decorated in 2014.

5. Re-pointing of the wall under the steps to the northern entrance and filling of gap between the top step and the landing in 2016.

6. Bell-cote floor re-sealed and structure re-painted in 2017. Bell checked and lubricated and top section of bell rope replaced.

7. Repairs to the stained glass on the north east window following minor vandalism incident in 2018

8. New header tank to the heating system installed in 2018.

9. New Notice Boards, one fixed to north wall of church, the other free standing and including an A3 locked cabinet, installed in 2021.

10. Two new replacement water pumps installed to the heating system under British Gas services contract in 2021.

11. Repairs to roof pending following recent storm damage. Awaiting approval of cost from insurers.

# 1.6 Floor Plan (not to scale)



### 1.7 Limitations of the report

The inspection was carried out from ground and floor levels only. The inspection was purely visual. Woodwork or other parts of the building that are covered, unexposed or inaccessible have not been inspected. The organ chamber was not inspected. Manhole covers were not lifted and the below ground drainage was not inspected. The adviser cannot therefore report that any such part of the building is free from defect.

The mechanical and electrical systems were not tested, and the advisor cannot state that they are free from defect. The PCC are advised to have the heating system checked annually and the electrical systems tested every five years.

This is a summary report; it is not a specification for the execution of the work and must not be used as such. The professional adviser is willing to advise the PCC on implementing the recommendations and will, if so requested, prepare a specification, seek tenders and oversee the repairs. The PCC is advised to seek on-going advice from the professional adviser on problems with the building. Contact should be made with the insurance company to ensure that cover is adequate. The repairs recommended in the report may be subject to Faculty or Archdeacon's approval.



View from the gallery

# The Report

Category scale

- A Urgent, requiring immediate attention
- B Requires attention within 12 months
- C Requires attention within the next 18-24 months
- D Requires attention within the quinquennial period
- E A desirable improvement with no timescale
- F Requires monitoring

M – Routine maintenance (i.e. clearing leaves from a gutter). This can be done without professional advice or a faculty

# 2.0 Exterior:

2.1 Roof coverings		
Condition	Chancel         Ridge stones – solidly bedded and pointed         Slating – missing slates at the apsidal end due to recent         storms (see photo opposite).         Nave         Pidge stones – solidly bedded and pointed	
	Ridge stones – solidly bedded and pointed Slating – some slipped, rotated and missing slates on the south slope.	
	Porch Ridge – solidly bedded and pointed Slating –all slates intact on north slope; south side and valley gutter not visible from ground level.	
Repair needs	Replacement of missing slates; refixing of slipped and rotated slates.	В

2.2 Rainwater goods and disposal systems	Comprise cast iron half round gutters and circular downpipes.	
<image/>	Porch Downpipe terminates approx. 600mm above road surface resulting in splashing onto the stonework (see photo).Nave There are leaking joints on the south side.Chancel The gutters are leaking at the joint resulting in splashing of the walls at low level.Generally The gutters have flaking paint and the gutter and downpipe joints are in need of re-caulking.	
Repair needs	Extending Porch downpipe to discharge at ground level	С
	Recaulking joints and redecoration of the rainwater goods.	С

2.3 Bell turret		
Condition/ repair needs	The fleche has a slight lean towards the east. This should be monitored.	F
	Some cedar shingles are missing from fleche on the south and south-west sides. These should be replaced to prevent water ingress and timber decay.	В
	The painted timber framework and lead cladding to the base appear in fair condition.	
	There are no louvres to the open bell structure to prevent water ingress and prevent birds nesting. It is recommended that louvres are fitted.	В
	The bell is understood to chime. NB The bell and mechanism could not be inspected due to the height.	

2.4 Parapets and upstand walls,		
finials, crosses and chimneys		
Condition/ repair needs	There are no parapets, upstand walls, finials or crosses. The brick chimney which acts as a flue from as boiler appears in fair condition. The stainless-steel flue liner terminal appears intact at the head of the chimney.	

2.5 External walling	See 2.6 for door masonry. See 2.7 for window masonry.	
	See 2.7 for window masonry.	
Condition		
	West gable:	
	The render is generally sound, but the following defects	
	were noted: -	
	- vertical cracking to right hand of the centreline	
	- vertical cracking to the right of the chimney	
	- some cracking to the verge of the Nave north roof slope	
	North wall:	
	The stonework and pointing are generally sound, but the	
	following defects were noted: -	
	- some decayed stone jambs to boiler house door	
	- some loose ribbon pointing and open joints at low level of	
	the boiler house	
Cracked render and verge pointing	- some loose ribbon pointing and open joints in the wall	
	below the external steps	
	- open bed and perpend joints to dwarf wall and coping	
	East apsidal walls:	
	The stonework and pointing are generally sound.	
AND	South wall:	
	The stonework and pointing are generally sound. However,	
	defects were noted as follows: -	
	- some stones with surface decay caused by hard ribbon	
Ribbon pointing in hard cement	pointing (see photo opposite).	
Risson pointing in hard coment	- surface decay to one of the door jamb stones	

Repair needs	West gable: - rake out and repair render to crack to RH of brick chimney - fill cracks in verge	С	
	<u>North wall</u> : - rake out and repoint open and loose pointing in lime mortar	С	

2.6 External doors and surrounds		
Condition	Main entrance: In sound structural and decorative condition. Hardware appropriate for use and security.	
	<u>Nave escape door</u> : In sound structural condition. Some scratches to paintwork of metal outer sheeting. Hardware appropriate for use and security.	
	Boiler house door: In fair structural condition but the paintwork is flaking at low level.	
Repair needs	Redecoration of the external doors is recommended within the quinquennium.	D

2.7 Windows and window masonry:		
Condition	<ul> <li>The glazing and leading is in good condition apart from <ul> <li>a small piece of glass missing from Chancel north window</li> <li>a small star crack to Chancel NE window.</li> <li>the polycarbonate outer glazing to the Chancel S and SE windows is clouded due to UV light (see photo).</li> </ul> </li> <li>The window masonry is generally in sound condition but there are some receding joints to mullions and at the base of the lintels to some of the window.</li> <li>West gable window above gallery See 5.8 for comments on infestation of flies.</li> </ul>	
Repair needs	Consideration to replacing the polycarbonate outer glazing in UV resistant polycarbonate.	E
	Localised raking out and repointing of open joints to window masonry in lime mortar.	D

3.1 Roof structures, ceilings	Please note that the voids above the ceilings are inaccessible and the writer cannot state that the roof structures are free from defect.
Condition	<u>Chancel and Nave</u> : Painted boarded ceilings, exposed purlins and exposed sections of trusses all appear in good structural and decorative condition.
	<u>Kitchen, toilet and passage</u> : Painted plasterboard ceilings - in good structural and decorative condition.
Nave roof structure	Porch: Painted boarded ceiling and exposed rafters - in fair condition.

3.2 Presence of bats etc.		
Comments	No evidence of bat droppings found internally. However, this does not necessarily mean that bats are not present. See Section 6.0 for sources of information should they be found.	

3.3 Internal wall finishes	See item 1.7 for window masonry.
Condition	Chancel and Nave:         Plaster and paintwork to external walls in good condition.         See 3.5 for wall panelling and partitions.         Kitchen, toilet and passage:         Painted plastered external walls in good condition.         Porch:         Painted plastered walls in fair condition.
Repair needs	None apparent.

3.4 Floors, platforms, pews	Please note that carpets and floorboards were not lifted so the condition of the sub floors could not be examined. The inspecting architect cannot state that these areas are free from defect.	
Condition/ comments	Chancel: Carpet in fair condition.	
	<u>Nave</u> : Varnished t & g boards in fair condition.	
	<u>Kitchen</u> : Vinyl sheet flooring – showing signs of fading.	

<u>Toilet</u> : Vinyl sheet flooring – the smooth surface could lead to slips for disabled users if there is water spillage. See 3.6 for actions.	
Passage: The passage ramps down from the Porch. Carpeted floor, substrate slightly uneven.	
<u>Porch</u> : The painted finish to the concrete floor is wearing by the passage door. Redecoration with masonry floor paint is recommended.	D
The suspended timber floors are ventilated via air bricks in the north and south external walls.	
The timber framed and upholstered chairs are in good condition.	

3.5 Partitions, panelling, doors & door furniture		
Condition/ comments	Partitions: The timber stud partition enclosing the kitchen, toilet and passage is in good structural and decorative condition.	
	Panelling: Wall panelling in the Chancel and Nave appears in good structural and decorative condition.	
	Doors: Nave - internal timber framed and glazed panelled doors – in good condition.	
	Toilet – lightweight cored doors with veneered facings – in good condition.	
	Porch/Lobby – timber framed doors with solid lower panel and upper glazed panel with diamond leading. The doors do not close against each other correctly (see photo). The lower bolt does not engage with the floor socket. Adjustment is needed.	С

3.6 Vestry, kitchen, toilet	See 3.1, 3.3 and 3.4 for comments on Vestry ceiling, wall surfaces and floor finish respectively.	
Condition/ comments	Vestry/ servery:A range of base units with oak panelled doors and laminateworktop and sink/drainer are located on the south wall. Afree-standing fridge is located in the NW corner. Amicrowave oven is located on the deep shelf by thewindow. There is no cooker or hob. There is a metal safeand a free-standing wardrobe for vestments on the northwall.All in good condition.	

<u>Toilet</u> : The accessible toilet is fitted out to current standards except that there is no call assistance alarm or tall mirror. Consideration should be given to fitting these.	E
The vinyl sheet flooring has a smooth surface which could be a slip hazard to disabled users. Consideration should be given to replacing the flooring with non-slip vinyl.	E
The folding chairs stored in the toilet will prevent wheelchair users transferring onto the toilet. The chairs should be stored elsewhere.	М

3.7 Disabled access and provision		
Comments	Access: The main access into the church is via the stone steps on the north side. There is ramped access to the escape door on the south side of the church.	
	<u>Toilet provision</u> : See 3.6 above.	

3.8 Fittings, fixtures, furniture and moveable articles		
Condition	<ul> <li><u>Fittings and furniture comprise</u>: -</li> <li>Gold coloured curtain behind altar with decorative frieze and columns</li> <li>Simple timber framed altar with linen front</li> <li>4No carved oak armchairs</li> <li>2No oak candelabras</li> <li>2No brass candlesticks</li> <li>1No brass crucifix on altar</li> <li>Varnished pine communion rail and supports</li> <li>Altar frontal chest</li> <li>Stone font with timber cover</li> </ul>	
	All in fair condition.	

3.9 Organ		
Condition	The organ built by Abbot and Smith of Leeds circa 1896. A major overhaul was carried out by Harrison and Harrison in 1990. The organ continues to be serviced and tuned by Harrison and Harrison and is understood to be in good working condition.	

3.10 West gallery		
Condition	The chipboard floor, upstand wall, and external walls are in fair condition. The aluminium 'loft ladder' has a loose side handle. This should be made secure for safety reasons. See 5.8 for comments on the infestation of flies.	С

# 4.0 Churchyard and environs:

4.1 Paths, drives and access		
Condition / repair needs	The 2m wide concrete path on the north and east sides of the church are in fair condition. The concrete base of the former hall is cracked in places and breaking up on the northern edge adjacent to the grassed embankment. The concrete steps are also breaking up. Consideration should be given to repairing the concrete in these locations.	E

4.2 Gates, fences, and railings		
Condition / repair needs	The decorative metal palisade fence and gates on the east boundary are in good condition.	
	The galvanised metal palisade fence on the west boundary is in fair condition.	
	The railings above the dwarf wall on the south side of the church has flaking paint. Removal of rust followed by redecoration is recommended.	D

4.3 Free standing walls		
Condition / repair needs	The dwarf stone south boundary wall has a number of open joints. Localised repointing is recommended.	D
	The dwarf stone wall enclosing the shrub bed on the south side of the church has some open joints. Localised repointing is recommended.	D

4.4 Churchyard		
Condition/ repair needs	The grassed embankment is cut in the growing season and is in good condition.	
	The Japanese Knotweed in the open land between the south boundary and the gable of the industrial unit behind is unsightly and creating a nuisance with loose branches littering the churchyard (see photo). It is suggested that the owners of the industrial unit are approached to see if the Knotweed could be removed.	E

4.5 Trees and shrubs		
Comments	The trees by the north, east and west boundaries are sufficiently far away from the church not to cause problems with overhanging branches or invasive tree roots.	
	The shrub beds to the north and south of the building are kept in a tidy condition.	

# 5.0 Services installations and other matters:

5.1 Heating installation		
Condition/ comments	The heating installation comprises a gas fired boiler (Ideal Concord C series 2 installed circa 2005) serving the original large bore heating pipes along the perimeters, supplemented by radiators fitted on the partition wall at the west side of the Nave.	
	The boiler has a stainless-steel flue taken vertically in a brick chimney above the Porch roof.	
	The heating system is serviced annually by British Gas. 2No new pumps have recently been fitted. The heating system is understood to provide good thermal comfort levels.	
	The heating chamber is dry and floor walls and ceilings are in reasonable condition.	

5.2 Electrical installation		
Condition/ comments	Power supply The meter and distribution board are located in the entrance porch. The distribution board is a modern type with plastic casing, MCB and RCCD protection (see photo).	
	Light fittings comprise: - Chancel • 2No chandeliers with 3No light bulbs each • LED spotlights	
	<ul><li>Nave</li><li>4No chandeliers with 5No light bulbs each</li><li>LED spotlights</li></ul>	
Distribution board	<ul><li>Gallery</li><li>2No chandeliers with 3No light bulbs each</li></ul>	
	<ul><li>Kitchen, toilet and passage</li><li>Ceiling mounted circular fluorescent lights in glass diffusers</li></ul>	
	<ul> <li>Emergency lighting</li> <li>Comprises 'maintained' escape light bulkhead fittings above escape doors.</li> </ul>	
	Socket outlets are located in the Nave and Kitchen.	
	Extract ventilation is provided in the kitchen and toilet. The extract fan to the toilet does not appear to be working and should be repaired or replaced. The kitchen extract fan does not seem very powerful.	В
	Consideration should be given to its replacement.	Е
Chandelier	Testing The electrical system was last tested in 2012. The system should be tested within the next six months and thereafter every five years.	В

5.3 Water supply		
Comments	Mains cold water supply is provided to the kitchen and toilet. Hot water to taps is provided by a gas fired combination boiler located in the kitchen. The hot and cold water services appear to be functioning correctly.	

5.4 Fire protection		
Comments	<ul> <li>Firefighting appliances comprise the following: -</li> <li>A foam extinguisher located in the porch</li> <li>A CO2 extinguisher located by the organ</li> </ul> These were last tested in October 2021 and should continue to be tested annually.	

5.5 Lightning Protection		
Comments	There is no lighting conduction system.	

5.6 Audio visual systems		
Comments	A plasma screen linked to a portable laptop is used as a display during services. There is a sound system with small portable speakers.	
	These were not tested during the inspection but are understood to be in good working condition. There is no induction loop system.	

5.7 Sustainability and Practical Path to Net Zero Carbon		
Comments	On 12 February 2020 General Synod recognised that we are in a climate emergency and committed to an ambitious carbon reduction target of Net Zero by 2030. The culture is changing fast, both outside and within the Church; questions of sustainability should inform all our buildings- related decisions from now on, and this report highlights opportunities for action. See the Practical Path to Net Zero Carbon for our churches (PPNZC) document in Appendix A.	D

5.8 Health and hygiene		
Comments	There were many flies buzzing around the west window to the balcony during the inspection and numerous dead flies were found on the balcony floor and stored contents.	
	The entry point of the flies (possibly the window casements or open ceiling boards) needs to be located and sealed as soon as possible. The dead flies should be removed for hygiene reasons.	В

# 6.0 Summary of repairs

Category scale

- A Urgent, requiring immediate attention.
- B Requires attention within 12 months.
- C Requires attention within the next 18-24 months.
- D Requires attention within the quinquennial period.
- E A desirable improvement with no timescale.
- F Requires monitoring
- M Routine maintenance. This can be done without professional advice or a faculty.

Category	Comment	Broad Budget
		Costs (excl VAT
		& fees)
А	None	
В	Roof slating repairs (2.1)	*
В	Replacing missing cedar shingles to fleche (2.3)	*
В	Fitting timber louvres to bell turret openings (2.3)	*
В	Repair/ replacement of toilet extract fan (5.2)	***
В	Electrical test (5.2)	***
В	Locating and sealing the entry points for flies above the gallery (5.8)	-
С	Extending porch downpipe to ground level (2.2)	*
С	Re-caulking joints and redecorating rainwater goods (2.2)	*
С	Repair to crack in render to west wall near chimney (2.5)	**
С	Raking out and repointing open joints to stone external walls (2.5)	**
С	Adjustment of Porch/Passage doors to close properly (3.5)	£300
С	Securing handle of gallery loft ladder (3.10)	DIY
D	Redecoration of external doors (2.6)	£300
D	Repointing open and receding joints to window masonry (2.7)	**
D	Repainting floor in entrance porch (3.4)	£100
D	Removal of rust and redecoration of railings (4.2)	£150 or DIY
D	Localised repointing of dwarf south boundary wall (4.3)	**
D	Localised repointing of dwarf north wall (4.3)	**
D	Consider sustainability and 'practical path to net zero carbon' (5.7)	-
E	Consider replacing polycarbonate glazing in new UV resistant type (2.7)	
E	Consider fitting a call alarm & tall mirror to disabled toilet (3.6)	***/ £50
E	Consider replacing disabled toilet floor in non-slip vinyl (3.6)	£250
E	Consider repairs to concrete base and steps to former hall (4.1)	?
Е	Consider discussing removal of Japanese Knotweed with neighbour (4.4)	-
E	Consider replacing kitchen extract fan (5.2)	***
F	Monitor leaning fleche to bell turret (2.3)	
М	Relocation of folding chairs away from disabled toilet (3.6)	-

\* Estimates should be obtained from a local roofing contractor

\*\* Estimates should be obtained from a local stonemason

\*\*\* Estimates should be obtained from a local electrical contractor

# 7.0 Maintenance recommendations and general advice

#### Accessibility and disabled people

The Equality Act 2010 bans unfair treatment and helps achieve equal opportunities in the workplace and wider society. Duties under the Act are placed on 'service providers', which include churches and the service they provide for worship and wider activities either in the church or a church hall. The PCC should ensure that they have understood their responsibilities under the Equality Act 2010. Further details and guidance are available at http://www.churchcare.co.uk/images/Accessibility\_Sept2017

#### Asbestos

A suitable and sufficient assessment should be made as to whether asbestos is or is liable to be present in the premises. The assessment has not been covered by this report and it is the duty of the PCC to ensure that this has been or is carried out.

#### Bats and other protected species

The PCC should be aware of its responsibilities where protected species are present in a church. Guidance can be found on http://www.churchcare.co.uk/churches/guidance-advice/looking-after-your-church/bats

#### **Electrical Installation**

Any electrical installation should be tested at least every five years in accordance with the recommendations of the Church Buildings Council. The inspection and testing should be carried out in accordance with IEE Regulations, latest edition, and an inspection certificate obtained in every case. The certificate should be kept with the Church Logbook.

#### **Fire extinguishers**

Obtain advice from Local Fire Prevention Officer on the correct type and location. Enter into a contract for annual maintenance with the supplier.

#### **Heating Installation**

A proper examination and test should be made of the heating system by a qualified engineer each summer before the heating season begins, and the report kept with the Church Logbook.

#### **Health and Safety**

Overall responsibility for the health and safety of the church and churchyard lies with the Incumbent and PCC. This report may identify areas of risk as part of the inspection, but this does not equate to a thorough and complete risk assessment by the PCC of the building and churchyard.

#### Insurances

Ensure adequate cover is maintained for the full cost of re-building and replacement of contents and ensure this is index linked to cover inflation.

#### **Lightning Protection**

Any lightning conductor should be tested at least every five years in accordance with the current British Standard by a competent engineer. The record of the test results and conditions should be kept with the Church Logbook.

#### Maintenance and restoration of church bells

This guidance is given by the Church Buildings Council to all parochial church councils. From 1st January 2016, it will be possible to carry out a range of works to bells without a faculty: see List A and List B in Schedule 1 to the Faculty Jurisdiction Rules 2015. Carrying out works in List A or List B is subject to conditions set out in the list. It is a condition of carrying out any works to bells under List A or List B that regard is had to this guidance. Additionally, in the case of List B works, the approval of the archdeacon must be obtained before they are carried out and the archdeacon may apply additional conditions. Further information can be found on http://www.churchcare.co.uk/images/Guidance\_Notes/Bells.pdf

#### Organ

Enter into an annual contract for maintenance and tuning.

#### Painting rainwater goods

Paint cast iron rainwater goods every five years min. Scrape and wire brush to remove rust. Apply primer/undercoat. Topcoat with 2 coats gloss paint. Use bituminous paint on inside of gutters.

#### Pointing of masonry

Must be done under the direction of the Church Architect who will advise on the correct mortar mix and method of application. (NB the wrong mortar mix can do more harm than good).

#### Plasterwork

Loose plaster is a problem in many churches and can be dangerous if large sections fall off the walls or plaster and lath ceilings. Loose sections are not always visible and sometimes can only be identified by tapping. It is advisable to check suspect areas from ladders where possible.

#### **Rainwater disposal systems**

Rainwater goods include the gutters and downpipes which are key to the survival of a church building. Together with a watertight roof, they ensure that rainwater is directed safely away from the building. As water is the greatest cause of damage to buildings, it is vital to keep these elements well maintained. Clean out gutters and gullies twice per year – late spring, late – autumn after leaves have fallen. See Church Care website under http://www.churchcare.co.uk/images/Guidance\_Notes/Rainwater.pdf

#### **Roof coverings**

A roof keeps out water and prevents the deterioration of the building and its contents. It needs to be carefully maintained in order to retain its weatherproof properties. Check frequently and repair as necessary. See Church Care website under http://www.churchcare.co.uk/images/Roofs\_August\_2016.pdf

#### Sustainable buildings

A quinquennial inspection is a good opportunity for a PCC to reflect on the sustainability of the building and its use. This may include adapting the building to allow greater community use, considering how to increase resilience in the face of predicted changes to the climate, as well as increasing energy efficiency and considering other environmental issues. See Appendix A for 'a Practical Path to "Net Zero Carbon" for our churches'.



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# A practical path to "net zero carbon" for our churches

These recommendations aim to help churches reduce their energy use and associated carbon emissions. They are based on the findings of our church energy audit programme and input from of a range of professionals in the field.

**NOTE**: Many of the suggestions below require faculty; please seek input early on. If the church interior is of historic, artistic, architectural or artistic interest, seek professional & DAC advice first, before making changes; stabilising the environment for these interiors is important to minimise cycles of treatment, with their inherent carbon cost.

A. Where These are actions that nearly all churches can benefit from, even low occupancy					
do we start?		churches used only on a Sunday. They are relatively easy, with relatively fast pay back.			
	They are a good place for churches to start, when trying to move towards 'net ze				
The b	The building itself:				
AI.	A1. Maintain the roof and gutters, to prevent damp entering the building and warm air escaping.				
A2.	Fix any bro	ken window panes $^{st}$ and make sure opening windows shut tightly, to reduce heat loss.			
A3.	Insulate arc reduced in	bund heating pipes to direct heat where you want it; this may allow other sources of heat to be			
A4.		from doors are problematic, draught-proof the gaps* or put up a door-curtain*.			
A5.	-	sing rugs/floor-coverings (with breathable backings) and cushions on/around the pews/chairs.			
100 DO 100	ng and light				
A6.		00% renewable electricity, for example through Parish Buying's energy basket, and "green" gas.			
A7.		ing settings better to usage, so you only run the heating when necessary <sup>*</sup> .			
A8.		water-filled radiators, try turning-off the heating 15 minutes before the service ends; for most			
, 10.	churches th	nis allows the heating system to continue to radiate residual warmth*.			
A9.		radiators, add a glycol based "anti-freeze" to your radiator system and review your frost setting.			
		ntbulbs with LEDs, where simple replacement is possible.			
	•	odlights with new LED units.			
		internet connection, install a HIVE- or NEST-type heating controller, to better control heating.			
		rent appliances fail, then replace with A+++ appliances.			
	e and polic				
		the Energy Footprint Tool each year, as part of your Parish Return, & communicate the results.			
		Energy Champion who monitors bills and encourages people to turn things off when not needed.			
		nergy efficiency procurement policy; commit to renewable electricity & A+++ rated appliances.			
		noving PCC meetings elsewhere during cold months, rather than running the church heating.			
	the rest:				
A18.		ow usage "Sunday" churches, once they have taken steps like these, their remaining non- energy use will be very small. For the majority, all they need to do now to be "net zero" is			
		mall remaining amount of energy through <u>Climate Stewards</u> or other reputable schemes.			
A19		about your church grounds. Is there an area where you could let vegetation or a tree grow?			
	/here				
		These are actions with a reasonably fast pay back for a church with medium energy usage, used a few times a week. Perhaps half of churches should consider them.			
do w					
nexť	<b>£</b>	Most actions cost more than the ones above, and/or require more time and thought.			
		Some require some specialist advice and/or installers. They are often good next steps			
	for those churches with the time and resources to move on further towards 'net zero'.				
The b	The building itself:				
BI.	BI. If you have an uninsulated, easy-to-access roof void, consult with your QI about insulating the loft*.				
B2.	B2. If you have problematic draughts from your door, and a door curtain wouldn't work, consult with your QI				
	about installing a glazed door within your porch, or even a draught-lobby*.				
	B3. Consider creating one or more smaller (separately heatable) spaces for smaller events.				
B4. Consider fabric wall-hangings or panels, with an air gap behind, as a barrier between people and cold walls.					
Heating and lighting:					
	B5. Learn how your building heats/cools and the link to comfort, by using data loggers (with good guidance).				
B6.					
B7. Install TRVs on radiators in meeting rooms & offices, to allow you to control them individually.					