# Holy Trinity Church, Hartshill

# Statement of Need (rev 5, 16/11/2025)

## Contents



Revision 5- October 2025

## Section 1 General information on Parish and Church

### Overview of Parish.

Hartshill is a village in the Borough of North Warwickshire with the towns of Atherstone 3 miles to the north-west and Nuneaton 3 miles to the south-east.


Not to scale.

To the north of the village there are three major transport routes-the Coventry Canal, the West Coast railway line and the A5.

Hartshill is a few miles from the officially recognised centre of England.

Hartshill sits on a very prominent ridge containing ancient granite rocks which have led to its quarrying activities.

It has attracted settlers from the Ice Age period. The Saxons called the place 'Heardred's Hill' which later became Hartshill.

Prior to the industrial revolution the parish had a tradition of mixed pastoral farming augmented with home crafts such as weaving, knitting and cheese making. Quarrying changed the landscape in the Parish with some distinctive mounds which have become landscape features.

At the 2021 census, the civil parish of Hartshill, which also includes the hamlet of Oldbury, had a population of 3,655. The Church of England parish boundaries are different and includes quite a large residential area to the south of Coleshill Road which is in the Borough of Nuneaton and Bedworth.

The population of the Church parish is 5400 (2021) and 48% have indicated they are of Christian faith.

One of the main characteristics of Hartshill is it has three large schools serving a much wider catchment area than the immediate village.

The catchment area, particularly for Hartshill Academy (11 to 16 age groups), includes parts of Nuneaton and rural areas in North Warwickshire. The school is 50 years old and has recently had a completely new school building. It had 971 pupils on its roll in 2023 (Ofsted report). It is situated in large grounds which provide a rural feel to the school.

Michael Drayton – the Junior School (7 to 11 age groups) is one of the largest in Warwickshire with 594 pupils on its roll (May 2025) again serving a wider catchment area than the village. The school is in modern single storey buildings opposite the Church.

Nathaniel Newton School is the Infant School and is near Hartshill Academy but tucked away behind houses in Victoria Road, and next to Snow Hill recreation ground. It is also housed in fairly modern accommodation and had 264 pupils on its roll in 2024 (Ofsted Report).

The other special characteristic of Hartshill is its Country Park (Hartshill Hayes) which is run by Warwickshire County Council. It covers 137 acres of woodland and open hilltop with magnificent views across the Anker Valley into Leicestershire. There are lots of delightful walks through the 2 woods and people travel miles to see the bluebell display in early spring. There are historic features within the wood.

Other special places in Hartshill include the remains of Hartshill Castle which is a scheduled ancient monument.
This was a motte and bailey castle and is now privately owned. There is no public access, but a public footpath runs down the side of it. It is also a feature in the street scene of Castle Road.

Hartshill Canal Yard on the Coventry Canal, built in 1773 to transport stone from the local quarries, contains an attractive collection of buildings used by British Waterways. It is a stopping point for leisure canal boats.

**Our Church.**

Holy Trinity is a Church of England Church with an evangelical outlook whose patrons are the Church Patronage Trust.

Its values are based on a commitment to God's word in the Bible and a desire for the Holy Spirit to direct its prayer and mission church life.

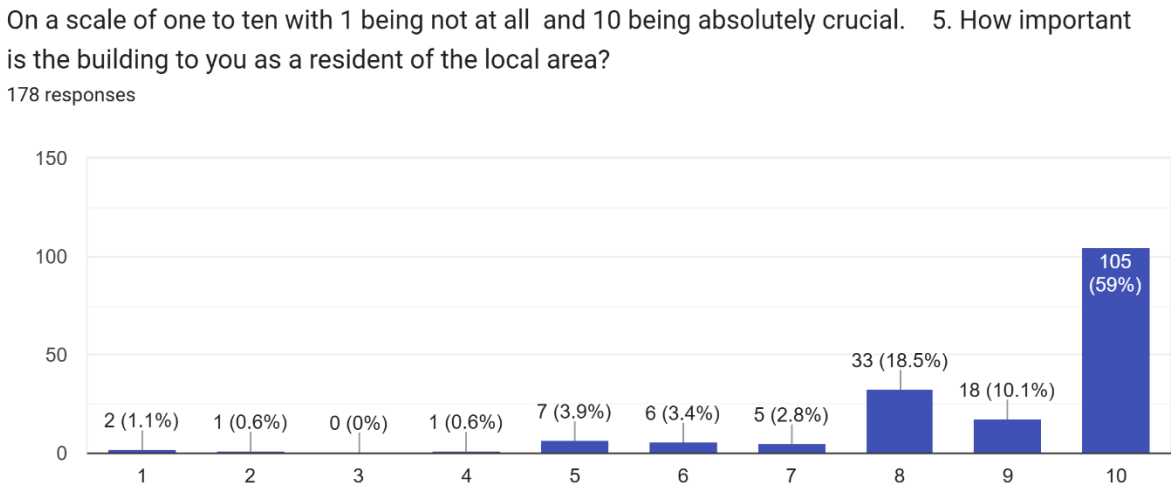
Holy Trinity Church holds one Sunday service each week, following a monthly pattern: Holy Communion is celebrated on the 1st and 3rd Sundays, while the 2nd and 4th Sundays feature a Service of the Word, designed as All Age Worship. During Holy Communion services, a Sunday School is offered in the Community Centre when there are enough children. In addition, a Prayer Group gathers every Tuesday morning for a time of reflection and shared prayer.
Information on attendance is included in Section 5.

In addition to its regular Sunday services, Holy Trinity Church hosts a variety of ceremonies throughout the year, including funerals and baptisms. The church also accommodates weddings and wedding blessings, typically averaging four to five annually. These occasional events are often attended by individuals who are not regular members of the congregation.

However, it demonstrates that a lot of people in the parish and even in the wider area identify Holy Trinity Church as 'their Church' when it comes to these 'life' events.

To guide the future of our church project, we distributed a questionnaire asking how important the Church is to members of the community.

Recognising that not everyone engages with digital platforms, we partnered with local shops and the community centre to reach a broader audience outside of our congregation. Shop staff kindly handed out copies at the checkout, helping us connect with individuals whose first point of contact is not through multimedia. This inclusive approach encouraged wider participation, gave voice to those who might otherwise be overlooked, and provided valuable insights to ensure our plans reflect the true role of the Church in people's lives. The diagram below shows the answers.




Other events such as Remembrance Day and the Christingle service also see a lot of people attending the Church from the wider community.

Schools use the Church building for visits as part of their curriculum and for Easter and Christmas services.
Atherstone Choral Society also uses the Church for concerts.

However, for much of a normal week the building is not used at all, and the Church is not kept open outside services.

Physically, the Church has a great presence in the street scene and was built partly as an expression of worship to God's glory. It is an attractive building from the outside and is Grade II listed.

It is a well-loved building in the village, including those who do not have faith or do not have the same faith.

The last Quinquennial report was done by our Church Architect in July 2023.

## Section 2 – What we need

Following the project development work, which is outlined in Section 4, the following needs for the church have been identified:

1.To repair the church in line with the recommendations of the Quinquennial Report July 2023. (Attached as Appendix 1)

2.To improve the welcome and appearance of the interior of the church building.

3.To provide a new and flexible heating system which will increase comfort of users and move the Church towards net zero carbon targets including the installation of solar panels.

4. To develop a spacious, adaptable area that can accommodate extra seating for large services, events, and concerts. This space will also serve as a venue for both temporary and permanent exhibitions celebrating local history and heritage. In addition, it will offer dedicated heritage resources for residents, visitors, and schools, enriching community learning and cultural engagement

5.To make use of the space under the Gallery to create 2 rooms for meetings, creche, Sunday school and for use by outside organisations.

6. To improve audio visual facilities and get WiFi into the building.

7. To dispose of redundant equipment, furnishings and books.

## Section 3 The proposals.

At its meeting on 8th September 2025 Hartshill Parochial Church Council resolved to submit a faculty application for the following-

- The removal of the existing gas boiler, pipework and radiators for the existing heating system
- Removal of the two redundant storage heaters at the western end of the Nave.
- Installation of pew heaters including floorworks and electrical wiring, and new control panel to enable the installation of the heaters to the pews.
- The purchase and use of heated pads for those pews without heaters.
- Installation of infrared heaters in apse and behind electric piano and organ.
- Where necessary plaster patching.

These works are part of a wider project for the church building and that is described in Section 4.

## Specific works for items in Proposal

Remove Wet System

- Remove Radiators, Boiler and Pipework

Re-wiring to update electrics to current standards, Electrician for updating electrical circuits

- New Electrical Heating Control System
- Install SMART electrical sockets throughout building

Heated Stadium Seats

- Electrician to cable in charging station
- Stand-alone shelving for the charging station

Underpew Heating.

- Works to form 150mm deep 75mm wide trench across aisles
- Concrete to backfill hole
- Works to fill 150mm deep 75mm wide trench
- Fit individual sockets
- Fix heaters to pews

Infrared Heaters

- Fit individual sockets
- Fix heaters to wall

Renewable Energy

- Install photovoltaic cells
- Install battery storage

Following a structural review this statement includes the underpinning of southeast corner of the building and installation of a tree root barrier

## Section 4- Why we need the proposals and timescale.

The proposals are part of a much bigger church project. The background to the setting up of this project is:

1.The Church Building has existed for over 175 years as a witness to worshipping God and a focal point both physically and emotionally for the community of Hartshill. We owe it to the previous generations and to God to try and secure its long-term future.

2.The Church in both financial and manpower resources is not in a sustainable position for the future. Like most rural churches our Church membership is shrinking and aging.

3.To achieve sustainability, we need to achieve a more community focused approach to our Church building and surrounding land.

4.We have not been able to carry out all the recommendations in the last two quinquennial reports due to lack of finance and manpower.

5.We need to take a holistic approach to securing the building's long-term future.

In 2019, a project team was set up to look at the future use and sustainability of the main Church building of Holy Trinity, Hartshill.

Although Holy Trinity Church is much more than its Church building the building is nevertheless a key element of the Church's ministry in Hartshill.

One of the first tasks was to prepare a vision statement.

The vision statement sets out the following aims and objectives:

***Aim for the vision statement:***

*'To make better use of our Church Building to the glory of God and for the benefit of the community which the Church serves.'*

***Objectives:***

1. *To provide a long term and sustainable future for the Church building, which is a very important and prominent Grade II listed building in Hartshill.*
2. *To bring a wider range of people together in using the building and to develop relationships in and across the community of Hartshill.*
3. *To improve the Church building and the spaces around the building that matter to the Community and contribute greatly to the appearance and visual amenity of the area.*
4. *To contribute to the development of the heritage of Hartshill as a resource for future generations.*

5. *To develop the arts and cultural facilities available to residents and students in Hartshill.*

*The vision for the future is also based on the mission statement of Holy Trinity and the Diocese of Coventry mission statement.*

*Holy Trinity, Hartshill - Mission Statement:*
*HOLY TRINITY CHURCH IS COMMITTED TO SHARING THE LOVE OF JESUS WITH ALL.*

*By:*
- *Providing Bible-based teaching, which makes the gospel of Jesus relevant to everyone.*
- *Providing witness which welcomes the Holy Spirit, is God-centred and changes lives.*
- *Sharing how God's Word can shape our Church and how our Church can shape society.*
- *Encouraging those in the wider community, by example, to find the strength and joy that Christianity can bring.*
- *Encouraging each other to grow in the faith and power of Christ and being witnesses to his love in our lives; and*
- *Providing fellowship and love to those we meet.*

*Through-*
*Pastoral Care*
*Prayer*
*Worship*
*Service to the Community.*
*Fellowship*
*Leadership*
*Outreach.*
*Use of God's Gifts.*

The Diocese of Coventry mission statement has three objectives:
- Worshipping God
- Making new disciples
- Transforming communities.

The Vision Statement was considered at a PCC meeting on 10th February 2020 and was subsequently amended. The PCC resolved to explore option 6 which was:

6. *Convert the Church building into a multi-use building so that it can be used for worship purposes as at present but make it available to the wider community for one-off and regular events such as use by the*

*local schools, concerts, arts exhibitions and sports clubs, at times when the Church building is not used for worship purposes.*

During 2020 meetings were held with representatives from the three schools, Ward Councilors, and Chair and Vice Chair of the Parish Council. Progress on the project came to a halt, largely due to the disruption caused by the Covid pandemic and a number of other unforeseen challenges. As a result, no further development was carried out during that period.

A significant change occurred when a committed church member died and left a generous legacy to the Church. This gave the Church impetus to move the project forward.

So, in 2023 work began again. It started with a meeting with Diocesan Advisory Committee (DAC) representatives, Claire Strachan, Tim Latham and Mark Seabourne on 23rd March 2023.
A note of the meeting drafted by Claire is attached as Appendix 2.

An update report was made to the Parochial Church Council (PCC) on 17th April 2023.

In line with the action points in the DAC note of the meeting a new project team was formed with new members.

Meetings were held with Andy Duncan (Diocesan Church Building Funding Support Officer) and Peter Bemrose (Diocesan Heating Advisor)

Two very important events took place at the end of 2023 which were:

1.Each member of the project team took time out to reflect on the important issues and the way forward for the project. Each member was asked to write down their views. One item stood out in the responses which was the building needs to be warm and welcoming.

2.The Project Team then decided that it needed a 'time of listening' up to Easter 2024. This was to be a focused time of exploration through prayer and listening to what God might be saying about the way forward for the project. Also, a period to listen to what others might be saying to us.

The Project Team came back together in May 2024 and shared their thoughts which led to a complete change in direction from thinking about converting the space for community use to one of maintaining the character of the Church for worship. But the most significant issue was heating and that was a significant driver in developing the proposals.

Throughout the rest of 2024 there was a great deal of work and investigations that went into developing ideas on how the project should progress.

The team also had several really helpful meetings with Jennifer Leadbetter, Heritage and Conversation Officer at North Warwickshire Borough Council. The advice in documents and from Jennifer Leadbetter was that there is no point in considering works for the interior of the Church unless the structure of the building is in sound and sustainable condition.

The decision was therefore taken to carry out the recommendations in the Quinquennial Report as a priority and in full.

The team also held an update meeting with the Chair and Vice Chair of the Parish Council.

We are very fortunate to have a headmaster who lives in the village who agreed to join our project team to give an external input into the project and bring other skills to the implementation on the project. A Borough Council ward member has also joined the team to help with engagement with the community.

All the project team's work led to a special PCC meeting on 13th January 2025 to consider two documents produced by the Project Team.

The first document outlined principles to guide the future development and implementation of the project. Those principles were:

1.To bring the Church Building into a sound and sustainable structural condition by implementing the actions identified in the quinquennial report. Also including the replacement of gutters and downpipes.

2.Retain the Church Building primarily for the Worship of God which involves making the internal layout suitable for Sunday Services, Life event services (Baptism, Weddings and Funerals) as well as special services/events such as Remembrance Day, Christingle and visits from Schools.

3.Retain the features that make if feel like a Church such as the Pews, Organ, Font and Lecterns.

4.Make the interior of the Church welcoming and inviting including redecoration, soft furnishings and adequate heating for the purposes that the building will be put to.

5.In relation to heating and other energy use to identify solutions to meet the aim of the Church of England target for zero carbon by 2030. This involves looking at zoning of the building and heating solutions bearing in mind that the use of the Church Building will still be infrequent.

6.To reach out to the community for involvement in looking after such a significant and historic building in the village given the aging and shrinking membership of Holy Trinity. This could include encouraging community gardening on parts of the open land around the Church and setting up a heritage group and heritage resource use for the building.

7.Despite the building remaining primarily for worship look at more community events that can make the Church in general more sustainable- this could include income generation events such as concerts and other organisations' use of a large space that can accommodate a lot of people. It could also be used by schools for educational reasons.

8.To look at new technology requirements such as Wi-Fi, sound and display systems for a modern use of the building.

9. To use a will legacy of a past Church member and seek grants to help finance the implementation of the plans and actions identified, for successful implementation, and completion of the project.

The other document was for recommendations on the identified works which is included as Appendix 3.

The PCC resolved to approve both documents.

After the PCC meeting two members of the project team met our Church architect Steven Matthews (Brown Matthews Architects Ltd). We went through the proposed works to the Church building.

He gave advice on a number of issues:
Windows in the nave- although he felt our ideas were sound Steven recommended that we obtain a report from a specialist contractor. He subsequently gave us 3 contacts.

Decorations-
We expressed concerns regarding the Conservation Officer's initial suggestion to strip the existing paintwork and replace it with lime-based paint. Upon discussion, he agreed that full removal was likely unnecessary. Instead, he asked us to look at the possibility of applying a stabilising coat over the current surface, followed by the use of a mineral water-based paint to ensure compatibility and longevity.

Replacement of Gutters and Drainpipes – Steven advised that we explore methods for assessing the appropriate sizing of rainwater goods to ensure they can handle the projected increase in rainfall associated with climate change. This proactive approach aims to future-proof the drainage system and reduce the risk of overflow or water damage during more intense weather events.

Replacement of gutters and drainpipes- Steven recommended getting calculations to determine the size of rainwater goods and gave us a contact who could do that.
Steven said we should obtain drawings of the existing church as follows:
Existing Ground floor plan of the nave and first floor of nave balcony.
North, South, East and West Elevations.
Cross section from North to South through the Church.
Existing Roof Plan.
Steven gave some contacts who could prepare these plans.
These plans can then be used to show our proposals to go with faculty applications.

Throughout 2025 a lot of detailed work was undertaken including very valuable meetings with Colin Angus (Diocesan Net Zero Carbon Advisor) and again with Andy Duncan.
Colin's notes of the meeting on 4th June are attached as Appendix 4. His advice and suggestions led to a rethink of our heating proposals.

Meetings were held with the Headteachers of Nathaniel Newton Infant School and Michael Drayton Junior School. Also, with the Vice Principal of Hartshill Academy.
A presentation was made to Hartshill Parish Council and to Ward Councillors.
A simple questionnaire was circulated by various methods to the community and there was a good response. See Appendix 5 for a summary of the results.

As a result of all that work and comments received the proposals were significantly altered particularly on the heating plans.
A report from the project team was presented to the PCC on 8th September 2025 which sets out the changes and the reasons for them which is attached in Appendix 6.
The PCC agreed the proposed changes to the original plans which in summary are-
No requirement for three-phase electricity supply to building.
No requirement for convection heaters.
No requirement for theatre curtains.
No requirement to move pews to the front of church.
Purchase and installation of 20 additional under pew heaters and personal heated pads.
Removal of the existing gas boiler heating system with no replacement.
Removal of gas meter, and capping off of associated pipework

The current plan includes the provision for additional sockets to be installed at this stage – just in case we need to add additional heating units at a future date.

The PCC at its meeting on 8th September 2025 received another report on expenditure on number of preliminary tasks including asbestos survey, structural engineer's report, training courses for PASMA Towers for Managers, Preparation of detailed plans for existing church, and fee for submission of planning application for Men and Women Community Shed. The report also included a recommendation for a resolution to submit a faculty application for the works outlined earlier in Section 3. That report is attached as appendix 7

The PCC approved the expenditure items and the resolution to submit a faculty application

The overall project has been split up into phases for the purposes of submission of faculty and funding applications as follows-

| Proposals | Costs | Grant(s) ** |
|---|---|---|
| Phase 1<br>Asbestos and structural surveys; digital church drawings; planning permission for Men's Shed and subsequent installation of Shed; Removal of wet system and storage heaters; all electrical works, installation of under pew heating and infrared heating at front of church; installation of internet and heating control system; plastering works; crack stitching and repair of other cracks, Installation of wheelchair access; and carpet at front of church and main isle. Photovoltaic cells and battery storage, Underpinning of southeast corner of building and tree root barrier | £152,000 plus VAT | Coventry Diocese's Net Zero (NZ); Buildings (B) Net Zero Quick Win (NZQW), Historic Churches funds |
| Phase 2<br>All glazing works; under pew heating for back of church; move font; install two new rooms below balcony; and re-establish entry and install new wheelchair ramp to side door | £77,000 plus VAT | Church Care Fund. |
| Phase 3<br>Install combined infrared and light units in 2 new rooms; decorating the church and vestry, repair wood block flooring in the nave; carpets for new rooms, Heritage Zone and isles; and fit out Heritage zone and two new rooms. | £39,000 plus VAT | Local community grants. |

| | | |
|---|---|---|
| Phase 4<br>Repositioning headstones; upgrade guttering and downpipes; formation of a community garden; and quinquennial works | £59,000 plus VAT | National Heritage Lottery Grant. |
| **Total Costs** | £327,000 | |

Breakdown of Finance.
Legacy- £81,000
Grants - £233,000

***** Please note that the grants column is intended as a guide only and should not be viewed as a definitive or prescriptive list. It offers indicative information to support planning and discussion, rather than a confirmed source of funding. The combined value of in-kind contributions, fundraising efforts, and donations will help offset overall project costs, thereby reducing the amount of grant funding required.***

It is proposed that the Photovoltaic cells will be added to the Community Centre room. To obtain the funding for the community centre especially from the National Lottery Big Grant a not-for-profit company had to be set up to receive the funding as neither the Church or the Parish Church were eligible for this fund. The Company engaged the architect, other professional input and appointed the contractors. This was made possible by a 25-year lease from the Diocese of Coventry. Legally the centre is the responsibility of the Company so the solar panel proposal will be in their name for funding purposes, but it is hoped that the Church will have a battery charged by these panels for use in the Church Building.

## Section 5- What is the evidence for the need.

The Quinquennial Report 2023 identified works to be carried out under the following headings:
- Urgent
- Within 12 months.
- Within 12 to 24 months.
- Within 5 years.
- Eventual.

A copy of the report's recommendations is contained in Appendix 1.
Very few items in the previous report (2018) had been implemented and there is now a mounting list of repairs and maintenance outstanding. Some of those items such as the repair of the leaded windows are a considerable cost outside the ability of the Church's normal finances to fund.

The boiler and heating system is old, unreliable and inefficient. People are not coming to Church because it is too cold in the winter. The huge spike in energy costs as a result of Russia invading Ukraine has had a major impact on the costs of heating the Church Building.

The main evidence of the need is the declining numbers of Church members and the majority of those that remain are above retirement age.
This is having a huge impact on the finances and the resources to keep the Church running. The same trend has occurred in the other churches that existed in Hartshill and that has already led to the closing of 3 non-conformist churches. The trend for Holy Trinity is not encouraging.

On a national scale, the Faith study carried out in 2016 showed that church attendance in Britain had declined from 11.8% of the population in 1980 to 5% in 2015. In just 35 years church attendance has halved. In 2015 the lowest percentage of those attending Church in the 4 countries was in England with just 4.7% of the population.

Using some of the service registers in the Warwickshire County Records Office and those the Church have currently retained the number of communicants over a period of time was examined. Unfortunately, until more recent service registers attendance figures were not recorded.
We used the same month October which was seen as a typical month without major festival dates and not as affected by holiday periods. This was done for every 10 years.

| Date | Range over the month | Average over month |
|---|---|---|
| 1907 | 7 to 22 communicants | 12 |
| 1917 | 5 to 15 | 9 |
| 1927 | 5 to 18 | 11 |
| 1936 | 4 to 42 | 20 |
| 1997 | 14 to 47 | 31 |
| 2007 | 61 to 68 | 65 |
| 2017 | 46 to 58 | 52 |
| 2024 | 24 to 35 | 30 |

Up to 1936 there was a Holy Communion at least once a Sunday often twice -8am and mid-morning. However, from about 1997 this reduced to two Holy Communion services a month.

It also has to be borne in mind that the population expanded significantly from 1901 to the present day probably from some 2000 to over 3500. Also, in 1936s there were quite a number of services on a Sunday- 8am, Morning service and evensong. So, it is possible attendance in total over those services amount to more than was the case in 1997.

Back in the early 1900s it would have probably been only local residents who attended the Church but today people travel some distance to attend Holy Trinity.

There was a significant revival in church at Holy Trinity in late 1990s but Covid in 2020 had a big impact as can be shown from this table. The figures are average attendance over the month of October

| Date | Attendance- Adults | Attendance Children |
|---|---|---|
| October 2019 | 49 | 8 |
| October 2024 | 28 | 4 |

A drop of 43% of adult attendance over a 5-year period and a 50% in the number of children.

More recently our Electoral Roll was renewed and now has 43 members of which 23 are non-residents (53%). This compared with the previous Electoral Roll which had 56 members- 22 were non-residents (39%). This represents a drop of 23% in members on the Electoral Roll.

This has inevitably had a huge impact on income at a time when costs have been rising steeply particularly heating costs.

In simple terms the Church is not in a good place in terms of Sunday services.

However, the picture is different for the major services which the community of Hartshill support. Number of Children in Brackets.

| Service | 2007 | 2017 | 2024 |
|---|---|---|---|
| Memorial | 220 (16) | 185 (6) | |
| Remembrance | 130 (65) | 142 (86) | 135 (79) |
| Christingle | Approx. 300 | 148 (108) | 140 (51) |

There is not a significant drop in attendance for these special services which are still really well supported and valued by the local community.

In addition, in December 2024 Michael Drayton School had 3 assemblies in the Church which was a total of some 600 children (with 20 teachers at each session).
Nathaniel Newton, the smaller infant school, had one assembly with 200 children and 25 adults

The use of the Church suggests that there is still a need for a large Church building to be used by schools and for other important community events such as Remembrance.

A local historian wrote a book on the history of Hartshill after a great deal of research and that showed that there is a considerable number of historical records and information which could provide resources for the three local schools. Consultations with the schools have confirmed that would be extremely useful. There is therefore the potential to set up a Heritage Group and resource centre at the Church.

There are a number of national studies that have shown the impact of the stresses of life are having on the mental health of people. The importance and benefits of open spaces, natural environment and beautiful spaces to reduce stress and give peace and time for people to reflect has been shown to be of great benefit.

There is potential to do more with the Church grounds and the possible setting up of a Community Gardening Group. There is also a need for a memorial garden as the rose garden at the front of church which was used for the interment of ashes is full.

The proposals also include the creation of a Hartshill Men's and Women's Shed, affiliated with the well-established Nuneaton Men's and Women's Shed initiative. Recognising that isolation can affect people of all ages, the group offers a welcoming space where individuals can share and develop woodworking, construction, and repair skills while connecting with others who share similar interests. With their existing Sheds now oversubscribed, there is strong enthusiasm for establishing a new facility in Hartshill - one that places greater emphasis on practical skills. These capabilities will also support the delivery of works identified in the Church's Quinquennial report.

The type of Shed will be the similar to the photo below and will be sited at the rear of the Community Centre Hall on an existing hard standing area.

## Section 6- The contribution of the need for environmental Sustainability.

The General Synod of the Church of England (C of E) voted in February 2020 for the whole of the C of E to achieve net zero carbon by 2030. This vote recognised that the global climate emergency is a crisis for God's creation and results in injustice to many parts of the world.
For the C of E, this means that the carbon emissions of their buildings and travel will be reduced to less than 10% of their baseline.

There is a more general need to meet the 5th Mark of Mission which is to "strive to safeguard the integrity of creating and sustain and renew the life of the earth. "

The key to this for our Church is the shift towards electric heating powered by 'green' electricity and not the use of any fossil burning boiler.

Analysis of the gas bills and records of church services for the period 1st October 2023 to 30th April 2024 showed that:
The total cost of gas supplied was £881.18
The total cost of the standing charge was £555.95

The church building was used on 48 separate occasions – of which there were less than 75 people attending on 40 occasions.
By calculation, the 'average' cost per service (including standing charge) was £30.06 – (please note that we know this figure is low due to the fact that for a number of services the heating was not working.)

Anticipated Running Costs (at today's prices).

The cost of heating a one-hour service during the 'winter church' scenario is anticipated to be 6.8kW @ 24.5p/kWh = £1.67

The cost of heating one hour for the full church scenario is anticipated to be 12.8kW @ 24.5p/kWh = £3.14

So as a comparison with the current running cost, the cost of heating 40 services @ £1.47 plus 8 services @ £2.94 = £66.64 + £25.09 = £91.73.

Comparison of Running Costs for the winter period.

The current cost of gas heating was £881.18.

The anticipated cost of electric heating is £91.73.

This could potentially give us a saving of around 90%

The anticipated cost of electric heating (£91.73) is less than the current gas standing charge (£555.95)!

Comparison of Environmental Impact – total kW usage.

The gas heating system used 15,329kW

The anticipated electric system will use 375kW

In kW, this could potentially give us a saving of 98%.

The Church will replace LED bulbs in its main lighting.

Installing solar panels and battery storage supports the church's net zero carbon goals by generating clean, renewable energy on-site. This reduces carbon emissions, lowers electricity bills, and cuts reliance on the grid. Battery storage ensures power is available during peak times or outages. Beyond savings, it demonstrates environmental leadership, inspires local climate action, and offers educational opportunities for schools and community groups. Embracing this technology strengthens the church's role as a resilient, forward-thinking hub at the heart of the community.

It already has a recycling bin for wastepaper but will look at our initiatives to reduce our carbon footprint in other areas. We have already moved away from printing notice sheets each week to using the overhead projector and using email services for those who cannot attend church.

The Church has invested in some really good artificial flower arrangements which are used for most of the services. There was of course the initial carbon footprint of making those but over a fairly short period of time these will have outweighed the carbon footprint of getting fresh flowers for each service. Fresh flowers are only used for special services such as Easter Day, and occasionally in memory of a loved one. It is hoped with the next initiative it might be able to use flowers and foliage which have been grown in the churchyard.

The proposals include creating a Community Garden. This would involve schemes to improve the diversity of habitats within the church grounds for wildlife. Bird boxes, hedgehog homes and other ideas for encouraging wildlife into the church grounds will be explored.

## Section 7- What options to meet the needs were considered.

This section explains in some detail how the proposals were arrived at and what options were considered. The flow diagram that is attached in Appendix 8 shows the rigorous approach the Project Team tried to take in exploring all options.

During the process to develop our proposals the team found the guidance published by the Cathedral and Buildings Division of the Church of England to be a very valuable resource.

A very useful telephone conversation took place between one of the project members and Adrian Fox, Environmental Sustainability Officer, Cathedral and Church Building Department.

Some of the team went to Baddesley Clinton Church to experience their under-pew heater system as part of one of their services.

The following headings (which relate to the flow diagram in Appendix 8) shows our process although many issues and options are interrelated. The option considerations are set out under each heading.

1.Could we make the best of the system we already have?

We looked at our existing situation with questions such as do we have a problem with draughts, temperature variations, condensation, and humidity.

To help address these questions, we installed combined temperature and humidity dataloggers in a carefully arranged matrix throughout the Church. This layout was designed not only to monitor conditions across various areas, but also to provide a three-dimensional profile of the internal environment, offering deeper insight into how temperature and moisture levels vary throughout the space.

We are not aware of any complaints of draughts and have not come across any at people height. Some of the windows may be draughty but that does not affect users of the building. The internal porch certainly helps and may have been installed for that purpose.

Temperature variations: our sensors have shown that there is a 5$^{o}$C difference between ground level and ceiling height (7.5m) when the heating has been used.

That is to be expected as hot air rises but as our current heating is based on heating the whole space of the building the results show how inefficient and infective the system is.

Condensation: we have never experienced a problem with condensation and given the volume of the interior of the building and size of the roof space it is definitely a well-ventilated interior.

Humidity: we believe that the biggest threat to the building from any excess humidity would be to the organ.

Adrian Fox also felt that given the nature of the construction of our building the only requirement to take into consideration on humidity is the organ.

The Institute of British Organ Building identified that heating systems that heat up and cool down slowly (no more than 2$^{o}$C in an hour) are best for fabric of the building and organ. Their prime concern is the control of relative humidity which in their opinion causes greater damage if relative humidity fails outside of 55 to 75% range.
Our monitoring showed that humidity is fairly constant and within this range.

In terms of our boiler, it is old, inefficient and costs a great deal of money to run. It has to be on for many hours to adequately heat the internal volume of the Church.

It does not meet any of the aims of achieving sustainability and replacing it with a new gas boiler even though it would be more efficient than the existing one would not help us achieve the Church of England (C of E) zero carbon target.

2. Sustainable energy source options:

Ground source heating is aimed at giving a constant heat temperature in the building and another system to boost temperatures when required. This is not the type of heating we are looking for, and the high installation cost of ground source heating would not be a cost/benefit solution to our Church.

Biomass boiler: we felt this is not going to be a feasible solution because of the demand of pellets/chips which has increased considerably in cost in recent years certainly since the Ukraine war.

Air source heat pump: this only works effectively when a constant background heat is required, and the building is well insulated. That is not the case for our Church building.

Photovoltaic solar panels: definitely want this as part of our proposals to achieve the C of E target on net zero carbon by 2030.
There are a number of difficulties in putting them on the Church south facing roof: it is a very prominent in the street scene and the visual impact on the listed building is unlikely to be acceptable.

The roof is shaded by trees, and it is very steep making accessibility for installation and maintenance expensive.

The best solution is to place them on the community centre roof, and we do have a quote for this. Installing photovoltaic cells and battery storage offers environmental, financial, and community benefits—supporting sustainability, reducing costs, and enhancing resilience.

3. What approaches to take in adopting a new electric heating system.

The key to this was whether we were aiming to heat the huge volume of space of the Church or to keep people warm. There is a significant difference in approach depending on the answer to that question.

The key determining factor on which to choose depends on how often the Church is used. If it is used every day perhaps by income earning uses, then space heating is logical but if it is infrequently used then a far more efficient system would be people heating.

As Section 4 above outlines the Church has moved from its original resolution of converting the interior of the building to be capable of multi-uses which can take place throughout the week to one of primarily retaining it for Church worship with ad hoc community uses.

One of the considerations for this decision is the existing community centre next to the Church which provides for regular community uses.
Both the centre and the Church share the limited car parking on the site and toilets/kitchen so a more intensive use of the Church could cause problems.

To help us move forward on decisions we analysed the type of uses the Church has been put to in a year.
From 1st October 2023 to 30th September 2024, The Church building was used on 83 separate occasions, made up of:

- 44 Sunday Morning Worship services (not including Café Church or those combined with a baptism)
- 7 Weddings
- 11 Funerals
- 10 Baptisms
- 2 School Assemblies
- 9 Special Services.

Additionally, a Tuesday morning prayer group meets most weeks in the church building, but it was not recorded on how many times they met during the period.

For the foreseeable future, we concluded that the use of the Church is still likely to be infrequent and would consist mainly of Sunday Church services. But we need to ensure that the Church's heating system is able to cater for larger services such as baptisms, weddings and funerals. Also, special services like Remembrance and one-off events such as concerts.

We felt that the main emphasis should be on people heating particularly for Sunday services. It is more about comfort than overall temperature in the building.

To be a sustainable heating system it also needs to be reliable and low maintenance.

Additionally, the system needs to react quickly to being turned on/off and up/down and the controls should be simple and have a long-term life-expectancy.

4. What is the best way to heat our building?

We previously received advice that there should be a level of background heat which can help maintain the integrity of the structure of the building.

However, because our Church is of a relatively modern construction with brick and granite stone walls with internal plaster finish unlike the structure and materials used in medieval Churches and cathedrals, we do not believe that is necessary.

To our knowledge the Church has never been heated when not in use. The original coal/coke system would only have been lit for services. The temperature within the Church tends to reflect the outside temperatures. Although because of its structure it takes longer to cool down and remains cooler in summer.

We are not aware of any problems with the structure of the building by not having constant background heating.

So, we feel we need a heating system which involves people heating - which would be a much more cost-effective way of keeping people warm in such a large space.

Colin Angus advice and suggestions were invaluable in looking at heating options (see Appendix 4)

Most people who come into the Church enter in a warm state. If ambient temperature is below 20$^{o}$C the body will start to cool. The aim would be to try to keep the temperature in the person's immediate proximity as close to 20$^{o}$C as possible.

5. Types of electric heat emitters.

Lots of different options have been considered, which included radiators, fan convectors, radiant infra-red, space heaters, and under pew heaters.

The project team dismissed trench heaters and underfloor heating. This would involve the laying of ducts in the existing wooden floor which would be disruptive and with reinstatement would be an expensive option.

Under pew heaters fit really well into the concept of people heating and the visit to Baddesley Clinton showed how efficient and cost effective they can be.

We have also brought 10 rechargeable heated cushions and members of our congregation have tried them out. They all found them good in keeping them warm.

6. Issues with concentrating our heating proposals on solely people heating.

3 specific issues were highlighted in the report to the PCC on 8th September 2025 (see Appendix 6)

1. People heating rather than space heating does mean that when people come into church it will feel as cold as being outside. We feel that people do dress appropriately for the outdoor temperature when coming to church and do not need to take off coats until they are in the pews where they will hopefully feel warm and comfortable.

There are a few occasions in some services when people move from their seats to exchange the peace with others and going up to take communion but the time away from the pews is quite short and in terms of losing body heat should not be too significant.

2.The amount of our people heating equipment (to avoid the need for 3 phase electricity supply) may not be sufficient to keep everyone warm in very big services such as Remembrance, Christingle and large funerals/weddings. Our heating proposals should be sufficient to keep around 150 people warm.

For the Remembrance Service people tend to wear clothes for the outdoor temperature as part of the service involves walking to the War Memorial and standing for some 10 minutes.

Christingle attracts a large number of people and there is some standing away from the pews.

We have prepared a Heating Resilience Plan as suggested by Colin and that could well include hiring in temporary heating equipment following Colin's advice where needed.

The intention would be to improve the ambient temperature prior to the service and try and not rely on them during the service. This would also apply to the rare events where we have funerals and weddings over 150 people.

3.There would be no heating at the back of the church where we wish to establish a heritage zone where there would be displays and resources. It is hoped that this will be open at times when the community library is open.

People may keep coats on if visiting the Heritage zone but if an individual or group are doing research, they can use one of the two glass fronted rooms which will include space heating or the library. It was felt we need not make any special provision for the heritage zone.

## Appendix 1- Quinquennial Report 2023 Recommendations.

SUMMARY OF WORKS REQUIRED

8.1 GENERAL MAINTENANCE It is absolutely essential that all rainwater downpipes, hoppers, gutters and ground channels and gullies are inspected regularly (at least twice a year) and cleared of silt, leaves, debris, small plants, etc.. A monthly inspection should be made of any vegetation growing against or up the walls of the Church and this should be immediately removed. During the inspection it was noticed that the channels were quite overgrown and these need to be cleared out. Note: A Faculty is likely to be required for all works other than minor items of general maintenance. Where there is doubt as to whether a Faculty is necessary, the DAC Secretary should be consulted.

8.2 WORKS REQUIRING ATTENTION OR REPAIR

i) Urgent

a) Carry out repairs to the cracked brick and stonework to the east end of the south elevation.

b) Clean off the moss growth to the window cills and the semiengineering blue brick weatherings to the plinth course.

c) Carry out repairs to the internal plasterwork to the nave and sanctuary.

d) Arrange for the structural engineer to revisit the Church and view the condition of the latest movement cracks.

ii) Requiring attention within 12 months

a) Repoint all open joints to the external brickwork and stonework. Also carefully infill the voids in the stonework.

b) Refix the metal protective grilles to the sanctuary windows.

c) Obtain a report on the condition of the trees growing close to the south elevation.

d) Arrange for a glass conservationist to visit the Church and inspect the weak leadwork to the windows. Carry out any repairs that are recommended.

iii) Requiring attention within 12-24 months

a) Arrange via the Church Architect to have stonework repairs carried out.

b) Point up the open mortar joints to the stone paving adjacent to the west doors (with lime based mortar).

c) Carefully clean down the external timber doors and frames and treat with Danish oil. De-rust all ironmongery and redecorate with black Hammerite paint.

d) Carry out repairs to the leaded light glazing.

e) Carefully de-rust and redecorate the ferramenta of the windows and the frames of the hopper ventilators.

iv) Requiring attention within 5 years (QI Period)

a) Renew the decorated stone cross to the east gable of the nave.

b) Arrange for all cracked render plaster to be repaired. Also carefully remove the Gypsum plaster form the north wall and replace with lime render.

c) De-rust and redecorate all cast iron rainwater goods.

d) Arrange for the walls and ceilings of the sanctuary and nave to be redecorated.

v) Eventual (no Timescale)

a) Arrange for the redecoration of the small vestry (walls and ceiling).

b) Carry out further masonry repairs.

c) Refix tiles to the north and south roof slopes of the nave and the sanctuary roof.

d) Carry out additional window repairs

## Appendix 2 Note of Meeting with DAC Officers

Holy Trinity, Hartshill.

Notes from site visit, 23rd March 2023 Attendees: Revd Stacy Taylor, Nick Blamire-Brown, Nick Miles, Tim Latham, Mark Seabourne, Claire Strachan.

*Community Centre* You highlighted that the community centre project has now been completed for some years now, and it is managed by the Parish Council. It has proved to be a well-used and popular space.

*Church*
Prior to the pandemic, you had started thinking about how to develop the Church space to complement the community centre and provide a flexible space that could be used by the Church, and for other events when the community centre is booked up. You are consulting with local schools and other potential user groups to find out what the market for wider community use would be. A Neighbourhood Plan has recently been completed (2017) in which lots of surveys and consultation were undertaken which can be used to inform your development proposals.

A well thought out and evidenced community-focused project could be of huge benefit to Hartshill and help to secure the Church's long-term future. Community outreach, particularly in serving the most vulnerable and needy, is part of our Christian mission and local ministry. Furthermore, the more people invested in a place – not necessarily financially, but emotionally – the more sustainable it will be in the future.

*Needs*
We talked about what the needs of the Church are. The priorities at the current time are:
1. Improved heating, possibly including solar PV for energy generation
2. Repairs to windows
3. Replastering/redecoration
4. Reordering to create flexible space (removal of pews), addition of facilities (WC, servery)

We recommend that you obtain advice from the DAC Heating Adviser, Peter Bemrose, regarding the heating options available that would work best for your Church usage.

It is important that the project team articulate the need for the reordering part of the proposals based on their own vision for the mission and ministry of the Church, and how they can support the wider needs of the community.

The pews, although not original to the Church, are part of the 1930s reordering of the Church under architect N.F. Cachemaille Day, who is gaining eminence as a significant twentieth century architect.

The pews form part of a designed piece with the other furniture in the Church including the pulpit and the lectern and are of good quality. A robust case would need to be made for their removal and break up of this set (which I'm sure can be made, it just might take a bit of thought and time to put this together and would be helped by supporting evidence for future use of the flexible space).

The need for the repair works are clear. Your Church architect (or whoever you choose to undertake the work) will need to provide a full specification for the repairs as part of the Faculty application. The next QI is due in July, so it will be worth waiting until then to develop this part of the proposals based on priorities.

*Funding*

With significant repairs and large-scale reordering planned, there is likely to be a need for additional funding. Andy Duncan, the Church Building Funding Support Officer, is best placed to support you with this.

Most large grants (like the NLHF) are only obtainable through a lengthy process which requires a lot of input from the PCC/Church project team and are highly competitive. Most funders will not consider building projects unless they have a community focus, beyond the worshipping community.

Successful applications to the NLHF will require a strong 'vision' that meets local needs and incorporates a high level of community engagement based on a number of outcomes. The new 10-year strategy has now been announced, with a focus on 'saving heritage, protecting the environment, inclusion, access and participation, and organisational sustainability'. The engagement will need to be centred on a story or 'theme', with events and activities developed into an 'Activity Plan'.

You are starting to explore ways in which you can tell the story of the Church. Possible themes include:

- Hartshill Castle
- Quarry and industrial heritage/development of village (did stone from Church come from there?) – "Stories in Stone"

Finding partners to help with the development and delivery of the community engagement side of things would also be beneficial – e.g. library service, local history groups, Warwickshire Wildlife Trust (if a natural environment strand to project).

Andy Duncan (Church Buildings Funding Support Officer – Andy.Duncan@Coventry.Anglican.org) can support the PCC with identifying potential funders and advising and helping with grant applications and particularly managing applications to the big funders like the NLFH.

*Next Steps*

• Take a look at the Crossing the Threshold toolkit – a thorough step by step guide into developing a community project in your Church building • Contact Andy Duncan regarding fundraising for such a project (he's away for the first 2 weeks of May)

• Develop a Project Team – this could be the PCC, as is, or a sub-committee of it continuing some PCC members and some others from the congregation who may be able to offer additional skills that would be useful (see Crossing the Threshold toolkit for more info).

• Place audit – identify what other public spaces there are in Hartshill, alongside their use and capacity. Identify what their benefits and barriers/downsides of them. What can Holy Trinity offer that they can't (if developed with facilities, flexible space and heating).

• Community survey – to determine where the gaps are in the local community, how people feel about the Church, and how Holy Trinity could meet local needs. Claire and Andy can provide examples of community surveys that you can use/adapt.

• Consult the Neighbourhood Plan to identify needs of the local community and explore whether/how the Church reordering project could meet these needs (and those of the worshipping congregation)

• Identify potential partners – speak to local charities, businesses and organisations about how Holy Trinity could help to support their work. Would they use the space if it was available? This could include, for example, local Community Officers, the NHS, homeless charities and foodbanks, schools, local history groups, uniformed groups (eg. Brownies etc). Ensure notes of any meetings or correspondence are retained, as they could be useful for funding applications!

• Make contact with the local councillor to discuss how they could support a community project at Holy Trinity, and what the local authority's vision for Hartshill is.

• Explore heating options – contact the DAC Heating Adviser (Peter Bemrose – peter@pbemrose.co.uk) who will be able to suggest options for new heating systems in the Church, based on use and budget.

• Do some feasibility/survey work to support need for reordering and formalise this into a 'feasibility' report – based on some of the steps above (community survey, neighbourhood plan, discussions with potential partners and parish council)

• Develop a Statement of Need for the project and submit to the DAC.
At this point they may recommend that a site visit be arranged to discuss the project in more detail (CS and TL to arrange).
• Following the QI, draw up the details of the repair project with the Church Architect.

# Appendix 3- Works Schedule with initial costs agreed by PCC on 13th January 2025.

| Recommendations From the Project Team | No | Yes | Net Zero | Approx Cost |
|---|---|---|---|---|
| **Low Carbon Options** (assumes 100% renewable electricity, from a 'green tariff' and/or solar panels) | | | | |
| Make what you already have last longer +/or be more efficient/effective e.g. by adding/using controls. Reduce the heat needed by reducing heat loss and draughts. | | ✓ | NET ZERO | £ 500 |
| Direct replacement of gas boiler with electric , with system improvements | | ✓ | NET ZERO | £ 4,000 |
| Under pew electric radiant and convective heaters | | ✓ | | £ 4,000 |
| Wall mounted or ceiling hung radiant heaters<br>Note: We feel it would have a negative visual impact inside church, and we would need a 5m drop from the ceiling for the ceiling hung heaters to be effective. | ✗ | | | |
| Other electric radiators / heaters | | ✓ | | £ 1,500 |
| Air-to-air heat pumps for smaller buildings<br>Note: We are not a small building - and therefore running times would be excessive. | ✗ | | | |
| **Lower Carbon Options** | | | | |
| A hybrid solution e.g. retaining gas/oil heating for coldest days and occasional events, with a smaller number of pew heaters in the commonly used areas for standard services | | ✓ | | |
| Biomass boiler with radiators<br>Note: We would need to build a storage facility and access to it for commercial vehicles to load. | ✗ | | | |
| Upgrade electrical supply, and install electric heating | | ✓ | | £ 5,000 |
| **Fossil Fuel Options** | | | | |
| Direct replacement boiler (oil-for-oil or gas-for-gas)<br>Note: Only on the basis that we want to move towards net zero | ✗ | | NET ZERO | |
| Replacing oil with gas<br>Note: External storage and access required which may not be practicable | ✗ | | NET ZERO | |
| **Additional Building Requirements** | | | | |
| Zoning of the building - including curtain(s) | | ✓ | | £ 6,500 |
| Create two new spaces, with access for external use | | ✓ | | £ 10,000 |
| Repairs to plasterwork | | ✓ | | £ 4,000 |
| Repairs to glazing | | ✓ | | £ 108,000 |
| Repairs to cracks | | ✓ | | £ 5,000 |
| Repairs to flooring | | ✓ | | £ 2,000 |
| Redecoration | | ✓ | | £ 3,000 |
| Upgrade of rain water system | | ✓ | | £ 2,000 |
| Works to form Altar Zone | | ✓ | | £ 3,000 |

| Community Heritage Zone | |
|---|---|
| Zoning | £ 4,000 |
| Brick/stone work | £ 8,500 |
| Metalwork | £ 3,000 |
| Woodwork | £ 2,000 |
| Roofing | £ 13,500 |
| Set-Up of Heritage Zone | £ 7,500 |

| Trades / Consultants/ Admin Costs etc (split 30% HT, 70% Heritage) | |
|---|---|
| Trades | £ 11,000 |
| Consultants | £ 2,000 |
| Admin | £ 4,000 |
| Scaffold | £ 2,000 |
| Fund Raising | £ 4,000 |
| Contingency (@ 15%) | £ 33,000 |

| Funding Requirements<br>Please note these are our current best ball-park figures, and we would need to move to getting external quotes for more accurate costings. | |
|---|---|
| Total | £ 253,000 |
| Church Funds | £ 56,100 |
| Heritage Fund | £ 196,900 |

**Additional considerations not yet valued**

**The installation of solar panels and battery storage units:**

Our current understanding is that installation of solar panels on the church may not be viable due to the pitch of the roof and the close locality of mature trees. An option could be to install the panels on the roof of the Community

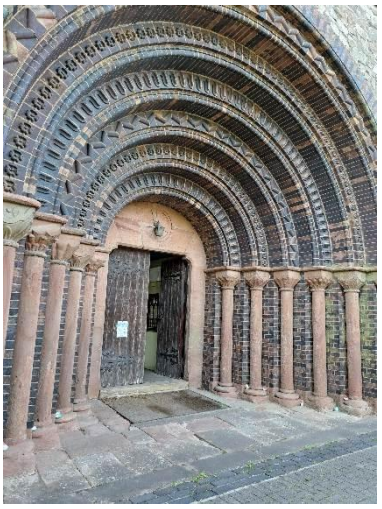
**Updating Audio Visual**

We may wish to change the current layout, and move to a wireless system. This gives us the opportunity to expose the two Trinity windows at the front of church.

**Internet**

This would be essential for the additional spaces we may wish to install and for the heritage zone. It could be used to enhance the delivery of our Services.

## Appendix 4- Net Zero Visit to Holy Trinity Church, Hartshill 4th June 2025



Nick Blamire-Brown initiated this meeting with Jeff Robinson, also present, representing the PCC. (I am Colin Angus (Net Zero Carbon – Project Officer).)

**Thank you** for inviting me to visit and for giving your time to help me understand the context in which you are meeting as a church. It was good to hear your ideas as you grapple with the heating issues that in terms of planning, you have gone so far to resolve.

These are notes from our discussions:

When you have calculated the potential maximum loadings for electric usage, you should contact the DNO/DSO* *National Grid* in your area, to obtain a quote for **upgrading to three phase** supply. Be ready to receive anything from a notional sum, through to a worrying 5-figure quote, or even a refusal to quote on the grounds of insufficient capacity in the local network. It will be good to remove this unknown factor from your planning. Calculate the loads associated with your proposals to guide what capacity you may require.

[* Distribution Network Operator, now referred to as Distribution System Operator.]

I think it would be better to defer consideration of **Solar PV** until you have established what the plan is for your heating. There are many options with Solar PV, but getting the church welcoming in cold weather is probably the higher priority. In your minds, the hall offers the better siting for any PV panels.

**Heating** at the front of the Nave. Your heating appraisal is very good. So we discussed pew heating and stadium seat heaters. We discounted Infrared heating on the basis of the difficulty of mounting them unobtrusively and we discounted space heating (more about that later). The emphasis on heating people is good to pursue.

You probably want to discount heated padded runners that are fixed to the seat of pews as they wouldn't provide heat to lower limbs.

Under-pew heaters have been developed and modernized and there are different types available for open or closed pews. A case study of a church which has adopted this solution is available here: https://www.churchofengland.org/about/environment-and-climate-change/st-andrews-chedworth-electric-heating

Space Heating

To commit to heating the space would be very expensive both in terms of the capital costs of introducing a new system and in terms of its running costs. You said how infrequently you would use it. This idea would require new central heating plant (your preference for electric is noted), with proposed investment into replacement pumps, controls and pipework and new radiators. You'd have to operate frost protection for the plant and equipment. Given the very occasional use for special events (just in the winter months, i.e. heating season), I questioned the thinking behind your appetite for this. I offered an alternative idea for your consideration. Both would be subject to Faculty. The alternative I offered was the idea of installing fixed wiring to a few strategic points located where you might then hire and install temporary heaters for any pre-planned events in the winter season. Temporary heaters come in different guises, with Infrared mounted on tripod stands and large fan heaters being two options. Either of these warrant fixed wiring beyond the normal capacity of 13 A rated circuits. Your insurers have views on the use of **temporary heating**. I recently came across useful guidance for churches here: https://www.churchofengland.org/sites/default/files/2023-05/Heating_temporary_options.pdf

If the **Organ** requires specialist protection, it might be worth getting advice on whether a humidistat controlled tube heater would be effective at protecting the organ from the risk of damage due to excessive damp.

Diocesan **Net Zero Grant Funds** for churches / church halls.

This is a summary of what can be found on the diocesan website.

**Net Zero** grant = 50% of approved project costs, i.e. up to £25k grant for projects up to £50k. If the church's proposed project cost is above £50k, the limit on grant is still £25k. This stream is subject to The Grants committee cycle and approval process. 6 x committee dates in 2025.

**£3k Quick Wins** fund – as above, but for lower amounts and not subject to committee meeting dates. 50% funding for projects up to £3k, max grant £1.5k. Heated cushions / gilets come to mind here. This is a diocesan grant fund.

**£10k Quick Wins** fund – This fund has been resourced externally and is now almost completely allocated. It's worth asking me for an update if you're thinking of applying for this.

We also have resources of a fundraising officer available to churches in the diocese. Andy Duncan can offer support, including applications to external grant making bodies.

nPower are currently inviting bids from charitable and other NGOs for grant funding for environmental and social/community projects. Your church is within the 50 mile radius from Solihull that is a key part of their eligibility criteria.

**Impartial Energy Audits**. I have attached a recent report, as an example, for your reference. Please let me know whether you'd like one to be completed for Holy Trinity Church. If so, I'll add your church to our diocesan list for you to receive an Energy Audit Survey and report. This will be useful for discussion with your PCC and your Eco-Church group (when you have one) or similar and for demonstrating your commitment to planning towards Net Zero emissions. Potentially it will strengthen your opportunities for successful fundraising as well. Please confirm by 28th June whether you'd like this type of report. Within our current plans, this would be funded by the Diocese at nil cost to your church. If this offer were to change, you'd have the option to reconsider.

We popped into **the community hall** which is a lovely old space. Although it is currently used as a part-time library, there are other possibilities. Being a smaller space, heating the space is a viable option, especially if it is zoned such that you don't have to heat unused areas whilst trying to heat the hall in isolation. If extra controls are required to achieve this, it may be worthwhile investment, depending on the anticipated further life of the current boiler. In any case, thermal efficiency improvements that should be explored further include insulating above the ceiling in the roof void, TRVs or a room thermostat, changing lighting over to LEDs and installing secondary glazing.

You could apply to DBF for grant funding for all of these measures. In the longer term, overhead Infrared heaters in panel or bar formats may offer flexibility in use with heating available on demand when required rather than routinely via a weekly timer cycle. Infrared heating is more efficient in a little used space and doesn't require much time to preheat before heating is required.

We looked at the other areas currently serving community needs. These are great. Lighting seemed to be mixed and I was told the heating was on a separate gas boiler. We didn't use my time to look further but could another time if you want to do so, especially if the remaining estimated useful life of the boiler is limited.

The **Energy Footprint Tool** is the third Annual Return required from PCCs. Providing you know your annual energy consumption for gas and electricity in 2024, this will be a pretty quick exercise. 74% of Coventry Diocese's churches completed the return for the 2023 data. This is a great achievement and really helps us to direct resources to support churches to reduce their costs for energy use and reduce carbon emissions too. Please let me know if you need help or support with this. The return deadline date is 30th June 2025. Completion of the EFT is a requirement for some grant funding options.

I like the proposals to use **curtains** to provide draft proofing and a sense of enclosure. They may have an impact on acoustics as the material will absorb sound at certain frequencies. Your proposals for localized heating (under pew etc.) might lessen the need for keeping curtains shut.

For the sake of completeness, I should mention that the **other low carbon technology** that is currently at the forefront of space heating for churches is provided by air source heat pumps.

Air to air is cheaper to install than ground source and offers efficiency of around 400%, meaning 1kW of electricity provides 4kW of heat (most of the time). In effect, the heat is delivered by heat transfer via fan convector units placed strategically. The external plant would have to be located sensitively, in terms of appearance and perceived noise in operation. This would be conditional on an acoustic survey report and local authority planning consent. 'Air to air' is also cheaper to install than 'air to water'. The latter would require a new wet system to be introduced with more radiators. Typically, these operate at lower surface temperatures than conventional boiler-fed systems. Underfloor heating would be expensive to introduce in the church. Given the heat losses from your building, it might not produce sufficient heat.

Some of the **resources** that I mentioned towards the end of our discussion include:

A Rocha **Eco Church** is a survey-based approach to encourage your church to care for God's Creation in theologically grounded expressions of worship and practical action. 107 churches across Coventry Diocese are registered, 85 have achieved award status from Bronze to Gold level. Eco church gives a good platform for many people to get involved in small and larger actions that will inspire many others to work to effect real change. https://ecochurch.arocha.org.uk/ Your Deanery Environment Representative is Dean Moore and he could help you to start the process.

**Local NZ Case Studies**. These feature local churches and schools that are working towards net zero carbon emissions. They include St George's Church, Rugby and All Saints Church, Leek Wootton who have made choices for replacing heating systems that are appropriate for their different contexts. https://www.coventry.anglican.org/net-zero-local-case-studies.php.

Rather than ignoring the other 'big ticket' repair items that you are contending with, I know that you have already contact Dr Claire Strachan for advice on how you might tackle the project as a whole and she knows about other limited grant funding that might be available claire.strachan@coventry.anglican.org

I've attached a template for your use which is a **Heating Resilience Plan**. It may act to guide your deliberations of alternative systems and to chart the journey.

There are still opportunities to swap more fittings over to **LED lighting**. The savings in use compared to using fluorescent lights or other older lamps make it worth doing as a proactive measure, rather than waiting for tubes or lamps to fail. It might be worth introducing a few movement sensors (aka PIRs) where lights get left switched on inadvertently (e.g. toilets). Bear in mind also that redundant fluorescent tubes and compact fluorescent (2D) lamps will need to be disposed of in compliance with WEE directives. You might as well do them in one large batch rather than piecemeal.

If you want dimmable LEDs, ensure you swap any existing dimmers to controls that suit these and select 'dimmable' LEDs. Faculty may apply where fittings are to be changed in the church, but the church hall offers many more opportunities for swapping to low energy lighting.

Further notes:

In terms of the main areas of the church, we spoke about the differences between Air to Air Source Heat pumps and Air to Water Air Source Heat Pumps. Generally Ground Source heat pumps are efficient but more expensive to install, with issues around archaeology being quite prevalent around historic church sites.

Air to air' can be thought of as being like Air Conditioning units, heating the space through convection. Air to Water' would distribute heat around your building via a wet system, similar to the current space heating. However the number, spread and size of the present radiator/convectors would be too small and ineffective for the lower surface temperatures associated with most Air to Water type systems.

Hence, if you consider this as a better option, you should also expect it also to be more expensive in terms of up-front (capital) expenditure.

Both types of air source heat pumps would have similar plant that would have to be sited externally but on or close to the building. Whichever type of air source heat pump you might opt for would require local authority planning consent as well as Faculty. In support of any planning application, the planning officers will require an Acoustic Survey of background noise levels to establish no harm to neighbours from proposed new plant. When planning the introduction of a new heating system, you need to incorporate time for the design, reports and approvals required. This isn't a quick fix process. The churchwardens at St Georges Rugby or at St Oswald's Rugby are willing to share their experiences that preceded the contractors' works. They can also share contact details for the suppliers they used.

We spoke briefly about Solar PV. You are considering it as an option for the hall rather than for the church. We can save further discussion about this for another day.

Thank you again. Stay in touch. Please say if you'd like me to pay another visit to discuss your ideas with the PCC or at a church meeting.

Colin Angus, Net Zero Carbon – Project Officer. 10th June 2025

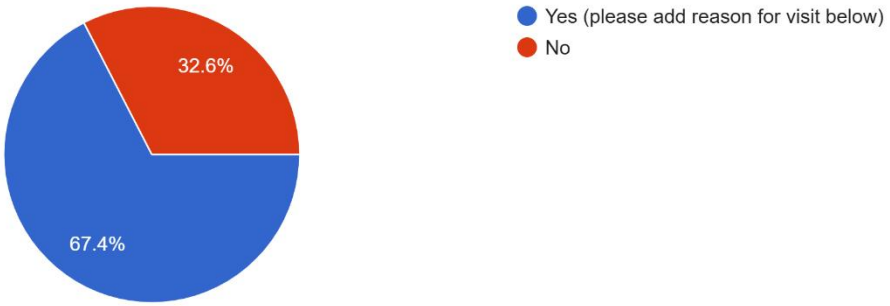
## Appendix 5- Community Questionnaire – Summary of Results.

### Community Questionnaire Holy Trinity Church Hartshill

Summer 2025

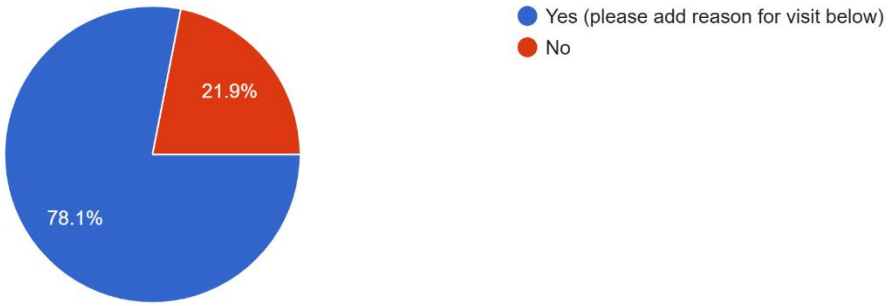
1. In the last year have you visited Holy Trinity Church?

178 responses



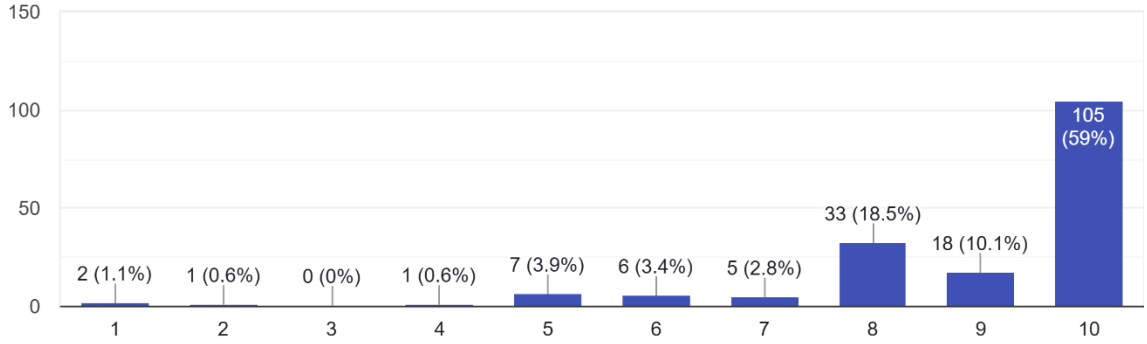

3. In the last year have you been in the community centre?

178 responses



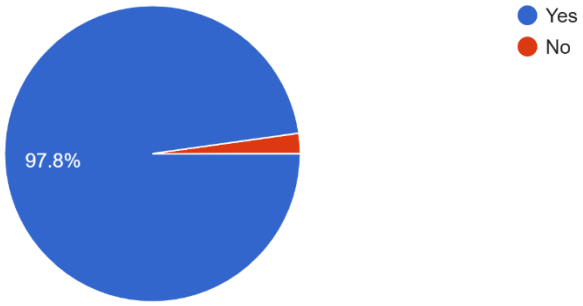
On a scale of one to ten with 1 being not at all  and 10 being absolutely crucial.  5. How important is the building to you as a resident of the local area?

178 responses



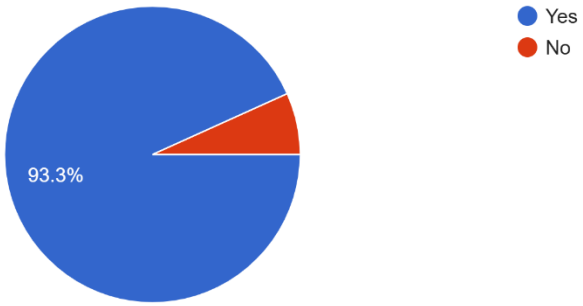

6. Do you think a Heritage Hub where the history of Hartshill is stored and is on display for the public is a good idea?

180 responses



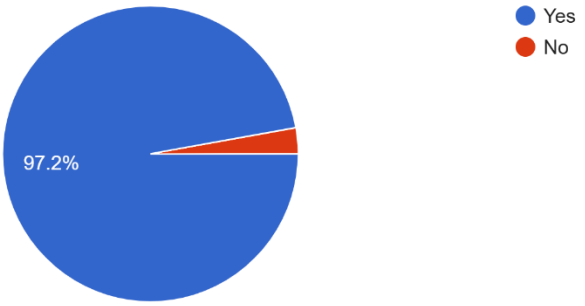

7. Would you visit the Heritage Hub?

178 responses



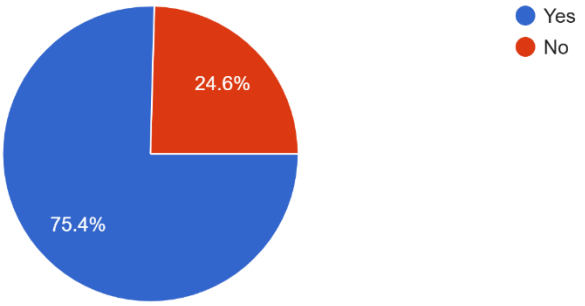
8. Do you think using some of the land behind the church as a community garden is a good idea?

176 responses



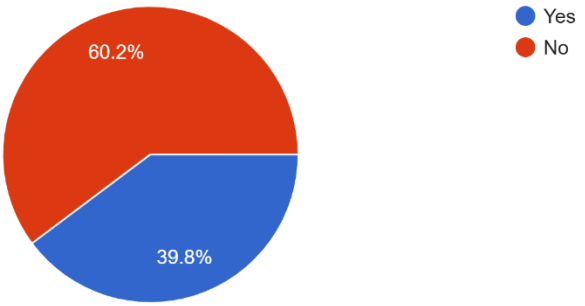

9. Would you like to use the community garden?

175 responses




10. Would you be interested in getting involved with the Heritage Hub?

176 responses



## Appendix 6- Reasons to the changes to our original proposal (as presented to the PCC on 8th September.

Upgrading To Three Phase

National Grid visited the church on 23rd July 2025 and provided an initial cost estimate of around £12,000. A significant portion of this relates to civil works for trenching (300mm wide by 600mm deep), which we may be able to source locally at better value. National Grid will supply the required specifications and are happy for us to undertake the trenching, subject to their prior approval. If we retain the current fuse board location, internal trenching and floor excavation will be needed, along with a 40mm access hole through the wall. Due to limited power availability on our side of the street, connecting from the opposite side may be necessary - adding substantial cost and requiring a road closure.

Upon receiving their budget estimate, we were advised that the quote exceeded £20,000 - excluding any additional costs associated with a potential road closure required to connect to the opposite side of the street and the additional costs associated. While we're not ruling out the possibility of a three-phase supply in the future, it's unlikely to be incorporated into the scope of our current project.

Solar PV

We have decided to defer consideration of Solar PV until we have established what the total plan is for our heating.

Space Heating

Over the past few months, this area has been a central focus of our work. Feedback from a meeting with Colin Angus, Net Zero Carbon Project Officer, prompted us to reassess our approach with fresh eyes. In hindsight, we may have been somewhat optimistic in aiming for a solution that could meet every possible need. Our goal was to modernise the wet heating system to deliver smooth, consistent, and dependable space heating - particularly during full-building use or colder periods - but his insights helped us better understand the practicalities and refine our expectations.

We looked at the average daily temperatures for CV10 0LY for 2023 and 2024
Based on the data it appears that space heating may only be required for approximately five weeks each year. When factoring in additional non-standard services, the system would likely be called upon for around ten services annually.

Following a simple cost-benefit analysis, we determined that for the relatively few occasions - approximately ten services a year - when full-building heating is required, the proposed upgrade to our current system, including replacing the aging gas boiler with an electric alternative and installing new radiators, offered limited value. Instead, we found greater merit in exploring targeted solutions that focus on heating people rather than the entire space.

By taking this approach, it removed the immediate need to upgrade to a three-phase supply - provided we can maintain adequate control over energy usage within the building using our existing 240 volt, 100 amp supply. We will now ask an electrical engineer to audit our plans.

**Convection Heating**

Our original plan was to use convection heaters to gently warm the space prior to each service, supported by underpew heating to enhance seated comfort. However, given the building's considerable size (13.5m × 30m × 7.5m), it quickly became apparent that convection heating would be both inefficient and energy intensive. In a space of this height, warm air naturally rises above the occupied zone, meaning that even after extended operation, the heat fails to reach the congregation in any meaningful way.

Theoretical modelling suggests that in a perfectly sealed and well-insulated Winter Zone (13.5m × 12m × 7.5m) with four 2kW convection heaters, it would take a minimum of 31 minutes to raise the temperature. – which is close to the 40 minutes that the Dyson Technical Department quoted during our initial correspondence.

However, this ideal scenario doesn't reflect reality. In practice, several factors significantly extend heating time:

- Heat loss through walls, windows, and roof
- Poor insulation, typical of historic church buildings
- Air stratification, with warm air pooling near the ceiling
- Heat absorption by furniture and building materials

Given these conditions, we now estimate that it would take between 2 to 4 hours - or more - to raise the temperature by 10°C. For short-duration use, the impact of convection heating is likely to be negligible. With no insulation and unavoidable heat loss, preheating the space using convection units results in high energy consumption with minimal perceptible benefit – and again their use could only be 10 times during the year.

**Winter Zone**

The initial plan was to combine convection heating with theatre curtains to contain the heat within a specific area.
If we move forward with using only underpew heaters and/or heated stadium-style seating during services, we need to consider whether the curtain option remains necessary or effective. With warmth now being delivered directly to seated individuals, the role of curtains in retaining ambient heat may be significantly reduced, potentially making them redundant in this revised approach.

However, since we currently see no need for convection heating, the requirement for theatre curtains has also been set aside. However, we acknowledge that future circumstances may prove otherwise.

With that in mind, our plans have been designed to accommodate the potential inclusion of these elements at a later stage - particularly by ensuring appropriate provision for electrical sockets and infrastructure should they be needed.

**Combined Underpew and Personal Heated Pads**

We assessed electrical usage within the building and have divided the areas into several areas.

- **Always On**: These are items that will always need to be available. These include; heating control panel, router for internet, photocopier, Internal lights, external lights, altar lights, vestry lights, library lights, heaters & computers. These add up to a maximum of **4.93kW**
- '**School Room'** (the new room with external access): This includes the combined heating and light units plus additional items, with a maximum of **1.84kW.** Unlikely to be used during a service.
- '**Church Room'** (the other room which could be used for Sunday School and Prayer Group): This includes the combined heating and light units plus additional items, with a maximum of **1.84kW**
- **Other**: This would include the stadium heater charging area and items for the heritage zone, with a maximum of **2.8kW.** Unlikely to be used during a service.

Our calculations indicate that we have approximately 16kW of capacity available before reaching the limit of our existing single-phase electrical supply.

We've revised the specification for the underpew heaters and are now planning to install BN Thermic's PH30 model, which measures 525mm in width and has a power requirement of 0.3kW per unit.

Based on our available capacity of approximately 16kW from the existing single-phase supply, this would allow for the installation of ~40 units.

This revised approach offers greater flexibility. We've assumed that one underpew heater will be sufficient for each side pew, while larger pews will require two units. Importantly, this means we can avoid relocating any pews at the front of the church, should that prove preferable, as the majority will now be equipped with heating.

We also plan to leave some areas intentionally unheated, recognising that some individuals may prefer a cooler space.

We also plan to offer personal heated pads as an optional comfort measure for those who may require additional warmth.

Most individuals entering the church arrive in a naturally "warm state," having retained body heat from prior activity or external conditions. However, when the ambient temperature falls below 20°C, the body begins to lose heat. The goal of our project is to maintain the temperature in each person's immediate vicinity as close to 20°C as possible. By achieving this, we can ensure that attendees remain comfortable throughout their time in the space, without the need to heat the entire building volume unnecessarily.

We believe that a layered approach - combining carpet underfoot, underpew heating for the backs of the legs, and optional personal heated pads for top of the legs, bottom and the lower back - offers the most effective and considerate heating solution for our congregation. This strategy prioritises comfort while remaining energy-efficient and adaptable, making it our preferred option for services held within the church.

**Control of Heating System**

We're currently exploring various methods to manage our heating system with the dual aim of maximising energy efficiency and preventing electrical overload. In the coming weeks, we'll be meeting with a company that offers a conventional solution. At the same time, we're investigating the potential of integrating Google Home into our setup, which would offer the added benefit of remote access and control. Our intention is to install smart sockets - rather than plug-in alternatives - and configure them into clearly defined zones within Google Home, allowing for more precise and flexible management of heating across the building.

Although not a primary consideration, as we continue to explore the building's history, we've gained a deeper appreciation for the vision and influence of N.F. Cachemaille-Day, particularly in the transformative changes made to the church during the 1940s.

By removing the need for the items listed above, we're able to preserve the architectural integrity of the space. The visual impact of our proposed changes remains minimal, allowing the character and design legacy of the building to remain at the forefront.

**However… Things to be considered**

1. If we adopt an approach that relies solely on underpew heaters and/or personal heated pads during services, we must acknowledge that the overall ambient temperature of the church may feel cooler - particularly when people are moving around. However, the seating areas themselves will offer a warm and comfortable experience, precisely where it matters most. This strategy prioritises direct personal comfort while significantly reducing energy consumption and avoiding the inefficiencies of trying to heat a vast, high-ceilinged space. It's a practical and thoughtful solution that balances the realities of our building with the needs of our congregation.

2. If we transition to using only underpew heaters and/or personal heated pads during services, we need to consider the implications for larger gatherings such as Christingle, Remembrance Sunday, large weddings and funerals. These events typically draw a full congregation, with attendees occupying not just the main seating area but also the rear of the church. Since underpew heating provides targeted warmth to seated individuals, areas without designated seating - particularly at the back - may feel noticeably cooler. This raises the question of whether supplementary heating or alternative arrangements will be needed to ensure comfort for those standing or seated in overflow areas during major services.

3. If we remove convection heating from our overall strategy, we need to carefully consider the impact this will have on the Heritage Zone during the winter months, particularly as this area will no longer benefit from any form of direct heating. Without convection heat to raise the ambient temperature, the Heritage Zone may become noticeably colder, potentially affecting its usability for visitors, volunteers, or any planned activities.

While underpew and/or seat-based heating will provide comfort in the main worship areas, the absence of background warmth in the Heritage Zone could limit its appeal and accessibility during colder periods. This shift calls for a reassessment of how the space is used seasonally and whether alternative low-level heating or conservation measures might be needed to maintain its function and protect the building fabric.

To move forward, we are requesting the release of funding to cover the provision of basic preparatory details, which are essential prior to submitting our application for the necessary Faculties. These details will support planning, compliance, and coordination across all stakeholders.

In line with the Projects Team's Cost Contingency Plan, we have approached a minimum of three companies for each element of the proposed works. We are now recommending the provider that offers the most balanced solution in terms of quality, value, and long-term benefit. This approach ensures transparency, competitiveness, and confidence in our next steps.

We look forward to the PCC's support as we begin this important phase of work.

## Updated Asbestos Survey

Before installing curtain tracks on the church ceiling, crack stitching the ceiling, removal of the storage heaters at the back of church, and decorating the back wall above the balcony, an asbestos survey update is essential to ensure safety to assess these areas. Disturbing materials without proper assessment could release hazardous fibres. The survey protects contractors, volunteers, congregation, and compliance with regulations—making sure the installation proceeds responsibly and without health risks. Safety must come first.

Company: Asbestos Inspection Services, Kimstead Kettlebrook Rd, Tamworth, B77 1AA

Cost: £350 plus VAT

## Structural Engineer

As highlighted in the latest quinquennial inspection, a structural engineer is required to assess the building's current condition. Their evaluation will inform a formal report and outline any necessary remedial actions to ensure the safety, integrity, and long-term preservation of the structure.

Company: JMS Engineers Ltd, Victoria Court, 25 Tennant Street, Nuneaton

Cost: £1,200 plus VAT

## PASMA Towers for Managers Training Course

Hiring internal tower scaffolding for the duration of the project required is proving costly and unsustainable.

It makes far more financial and practical sense to invest in our own mobile access tower. By training two individuals through the PASMA Towers for Managers course, we'll ensure competent sign-off each time the tower is used. This not only improves safety and compliance but also gives us flexibility to use the tower both internally and externally across the site - reducing the need for scaffolding. Long-term, this approach reduces hire costs, increases efficiency, and empowers our team to manage work at height responsibly and independently. Training can be undertaken in Birmingham.

Company: There are a number of companies able to undertake the training, it will be the dates and availability that will decide.

Cost: ~£150 per person plus VAT

## Church Drawings

To support the architect, DAC, North Warwickshire Building Council applications, and potential funders, we'll need a company that can produce accurate digital drawings of both the building and grounds. These should ideally be in CAD or similar formats to ensure compatibility across planning, design, and compliance processes.

Company: Lucion Survey Ltd, Suite 20, The Hall, Priory Hill, Rugby Rd, Wolston

Cost £3,150 plus VAT

## Men's Shed

We would like to provide the Men's Shed organisation with a dedicated base in our church grounds. Men's Sheds are community spaces where men can come together to connect, converse, and create—offering vital support for wellbeing, skill-sharing, and social inclusion. By establishing a local Shed, we hope to attract individuals with practical skills in carpentry, plumbing, electrical work, and general maintenance. Their involvement could significantly contribute to the completion of tasks identified in our latest quinquennial inspection, as well as assist with works planned in our heating project.

To make this possible, we propose installing a purpose-built shed on the grounds. This will require planning permission, and the funding requested at this stage is solely to cover that initial cost. Once approved, we aim to integrate the Men's Shed into our wider project as soon as practicable, enabling them to begin work and establish their presence.

This initiative not only supports a valuable community organisation but also offers a sustainable, cost-effective way to maintain and improve our facilities with local expertise and shared purpose.

Company: North Warwickshire Borough Council

Cost: £1,000

Resolution to submit first faculty application.

We would like to submit a faculty application for the heating proposals so are seeking a PCC resolution to do this so suggestion is -

'The Holy Trinity Parochial Church Council agrees to the submission of a faculty application for

- the installation of pew heaters including floorworks and electrical wiring, and new control panel to enable the installation of the heaters to the pews.
- The purchase and use of heated pads for those pews without heaters.
- The removal of the existing gas boiler, pipework and radiators for the existing heating system.
- Removal of the two redundant storage heaters at the western end of the Nave.
- Installation of infrared heaters in apse and behind electric piano and organ.
- Where necessary plaster patching.'

# Appendix 8- Flow Chart.

## Heating System Flowchart

The aim of this project is to develop a heating system for our church building; providing an outcome which offers the best combination of comfort and environmental care.

Adrian Fox, Environmental Sustainability Officer for Cathedral and Church Building Department, commentated that: ""It can seem a difficult task finding the right solution, but if you stay open minded, ask the difficult questions and let fact not feeling steer you, I'm sure you will reach the right conclusion."

Currently, heating is provided by a combination of gas fired boiler supplying hot water to radiators located throughout the church, and two separate storage heaters. Both systems are temperature controlled on a timed system. Only one of the storage heaters is currently operational, and the ability of the boiler and its controls to provide consistent heating when required is a challenge. When all systems are working, they have the ability to provide a comfortable environment - but not as often as desired.

**Basic Staring Facts**

1. The regular worship pattern of our church building currently consists of a weekly Sunday Service and Tuesday morning Prayer Group.
2. There a number of church festivals that may include additional services, such as Lent, Easter, Epiphany, Acension etc.
3. There are also a couple of special events such as Christingle, The Light Party and the Memorial Service.
4. Outside of this, there are Baptisms, Blessings, Marriages and Funerals that occur on an ad-hoc basis throughout the year.
5. The local schools use the church for their annual Christmas Celebration.
6. The community use is concert based - with only occasional use.
7. With the exception of the school's Christmas Celebration, Christingle, Rememberance Sunday and very large weddings and funerals, current seating capacity is adequate.
8. For the last 12 months (1st October 2023 to 30th September 2024), 88% of all services were attended by no more than 78 people.


During our planning phase, we have found the guidance published by the Cathedral and Buildings Division of the Church of England to be a valuable resource.

It provides a balanced approach to the subject, and we would recommend you utilise the on-line documents if you need further information on specific items as you work through this important document.

This can be found at: https://www.churchofengland.org/resources/churchcare/advice-and-guidance-church-buildings/heating

As well as giving guidance, it also supplies Case Studies and links to other resources you may need.

**Background Reading**

If you are not familiar with the heating requirements of a church building, then it may be useful to consider doing some background reading.

This flowchart is split into 15 sections, which can be sub-divided into the following areas:

**Sections 1 to 2** asks you to look at the current way we heat our church and the people who use it during the week.

**Sections 3 to 8** looks at important issues where it would be useful for you to have a working knowledge of the basic elements that all churches need to understand regarding the heating of their building(s,

**Sections 9 to 12** looks at the proposals on how we may wish heat our building and the people who use it moving forward.

**Sections 13 to 14** looks at how we should look to cover the recommendations for work on our church as detailed within our 2023 Quinquennial Report.

**Section 15** looks at the potential to form a community heritage area within our church building.

If you want a crash course to give an appreciation of the overall task in hand, we recommend that you read 5 HEATING CHECKLIST and 6 PITFALLS as a starting point.

Sections 3 to 8 would be next. Below is a list of the topics to be investigated, which are cross referenced to the guidance document published by the Cathedral and Building Division of the Church of England detailed above.

The internet can also proivide a useful resource.

| |  PRINCIPLES |  PERSPECTIVES |  APPROACHES |  DECARBONISING AND THE FUTURE OF HEAT |  HEATING CHECKLIST |  PITFALLS |  OPTIONS APPRAISALS AND GETTING ADVICE |
|---|---|---|---|---|---|---|---|
| **Section 3: Which key drivers should direct the way we move forward with our heating system?** | | | | | | | |
| 3.1 5th Mark of Mission | | 2h | | | | | |
| 3.2 The comfort of those using our church | 1a, 1b | 2a | | | 5b, 5e | | 7b |
| 3.3 The impact of our choices externally | 1b | 2e, 2f, 2g | | 4f | 5i, 5j, 5k | 6a, 6g | 7f, 7g |
| 3.4 Protection of historical aspects of our church | 1b | 2e | | | 5f | 6b, 6c | |
| | | | | | | | |
| **Section 4: What approach(es) should we take with our heating system?** | 1a, 1b, 1c | 2a, 2b, 2c, 2d | 3b | 4d | | 6a | 7b, 7c, 7d |
| | | | | | | | |
| **Section 5: What currently happens in our church building and ideas for its future use** | | | | | | | |
| 5.1 Current Usage | 1a, 1b | 2a, 2b, 2c, 2d | | | 5a - 5h | | 7b |
| 5.2 Future Usage | 1a, 1b | | | 4f | 5b, 5c | | |
| 5.3 Consider how the church space is or could be used | 1a, 1b | 2a, 2b, 2c, 2d | | 4f | 5a - 5h | | 7b |
| 5.4 Consider how the church space could be used - church space | 1a, 1b | 2a, 2b, 2c, 2d | | 4f | 5a - 5h | | 7b |
| 5.5 Consider how the church space is or could be used - who are we heating | 1a, 1b | 2a, 2b, 2c, 2d | | 4f | 5a - 5h | | 7b |
| 5.6 Consider how the church space is or could be used - type of event | 1a, 1b | 2a, 2b, 2c, 2d | | 4f | 5a - 5h | | 7b |
| 5.7 Consider how the church space is or could be used - where to heat | 1a, 1b | 2a, 2b, 2c, 2d | | 4f | 5a - 5h | | 7b |

## Section 6: What is the best way to heat our building?

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

A heating system to provide background heating ☐ | A heating system to provide frost prevention ☑ | A heating system to provide conservation heating ☐

A heating system to provide space heating ☑ | A heating system to provide people heating ☑ | A heating system to provide 'winter church' ☑

## Section 7: Which fuel(s) should we be using?

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Natural Gas as the only fuel source for any heating system ☐ | Consider installing solar photovoltaic panels plus battery storage ☑

Green Electricity as the only fuel source for any heating system ☑ | A combination of Gas and Green Electricity as fuel sources for any heating system ☐

## Section 8: Which heat emitter(s) should we be using?

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Radiators ☑ | Trench Heaters ☐ | Fan Convectors ☑ | Radiant Infra-Red ☑ | Underfloor Heating ☐ | Space Heaters ☑ | Church Pew Heaters ☑

Reposition radiators and storage heaters ☑ | Upgrade our radiators and storage heaters ☑ | Remove radiators, storage heaters and boiler ☐

## Section 9: Proposals for when the altar Zone is used for a service

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Carpet The Entire Area ☑ | Move The Sound System Controls ☑ | Reposition Pews ☑ | Install Theatre Curtain ☑ | Install Wifi Within The Building ☑

Under Pew Heating ☑ | Portable Heated Seat Pad ☑ | Move The Two Stalls ☑ | Upgrade Audio Systems ☑ | Additional Screen(s) and/or Monitors ☑

Install Convection Heaters ☑ | Relocate The Digital Piano ☑ | Electric Boiler ☑ | Install Infra-Red Heaters ☑

## Section 10: Proposals for when the combined Altar and Pew Zones are used for a service

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Repositioning Of Pews ☑ | Modification of one of the large pews to make into a smaller pew ☑

## Section 11: Proposals for when the majority of the church is used for a service

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Repositioning Of the font ☑ | Removal of the font ☐

## Section 12: Proposals for use of the area within and below the gallery section of the church

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Install Curtain To Gallery Space ☑ | Create A 'New Space' Under the Gallery ☑ | Re-Open The External Door ☑ | Create Second 'New Space' ☑

## Section 13: Proposals for internal works identified in our 2023 Quinquennial Report

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Plasterwork ☑ | Glazing ☑ ☑ | Cracking ☑ | Flooring ☑

## Section 14: Proposals for external works identified in our 2023 Quinquennial Report

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

General Maintenance ☑ | Brick/Stone work ☑ | Moss ☑ | Metalwork ☑ | Roofing ☑ | Woodwork ☑

## Section 15: Proposal to establish a Community Heritage Zone

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Install a theatre curtain to zone off this space ☑ | Allocate the second 'new space' for Heritage ☑ | Purchase associated equipment ☑

Install wall mounted convection heaters ☑ | Carpet the heritage area and links to altar area ☑ | Maintenance to spriral staircase ☑

For the flowchart below, each section consists of the following (please note the shapes used are not standard, but square as they fit better into the space available):

ITEM — There are a number of issues to look at, and each element will be colour coded on the extreme left hand column.

Start — For each item there will be a start and a finish position. From the start follow the directional arrows to navigate through to the finish. Finish

The general direction route will be with a black

If any of your answers are YES, follow the green line.

If any of your answers are NO, follow the red line.

Boiler — All subsections will start with an orange box detailing the item to be considered.

The boiler is gas fired — Basic information and/or comment will be within a purple box.

Do we need to make changes? — The decision to be made will be within a dark red box.

If your decision is YES, put a tick in the Green Box.

If your decision is NO, put a cross in the Red Box.

If you are unsure, or need more information, put a question mark in the Blue Box.

## Section 6: What is the best way to heat our building?

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

A heating system to provide background heating ☐ | A heating system to provide frost prevention ☑ | A heating system to provide conservation heating ☐

A heating system to provide space heating ☑ | A heating system to provide people heating ☑ | A heating system to provide 'winter church' ☑

## Section 7: Which fuel(s) should we be using?

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Natural Gas as the only fuel source for any heating system ☐ | Consider installing solar photovoltaic panels plus battery storage ☑

Green Electricity as the only fuel source for any heating system ☑ | A combination of Gas and Green Electricity as fuel sources for any heating system ☐

## Section 8: Which heat emitter(s) should we be using?

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Radiators ☑ | Trench Heaters ☐ | Fan Convectors ☑ | Radiant Infra-Red ☑ | Underfloor Heating ☐ | Space Heaters ☑ | Church Pew Heaters ☑

Reposition radiators and storage heaters ☑ | Upgrade our radiators and storage heaters ☑ | Remove radiators, storage heaters and boiler ☐

## Section 9: Proposals for when the altar Zone is used for a service

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Carpet The Entire Area ☑ | Move The Sound System Controls ☑ | Reposition Pews ☑ | Install Theatre Curtain ☑ | Install Wifi Within The Building ☑

Under Pew Heating ☑ | Portable Heated Seat Pad ☑ | Move The Two Stalls ☑ | Upgrade Audio Systems ☑ | Additional Screen(s) and/or Monitors ☑

Install Convection Heaters ☑ | Relocate The Digital Piano ☑ | Electric Boiler ☑ | Install Infra-Red Heaters ☑

## Section 10: Proposals for when the combined Altar and Pew Zones are used for a service

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Repositioning Of Pews ☑ | Modification of one of the large pews to make into a smaller pew ☑

## Section 11: Proposals for when the majority of the church is used for a service

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Repositioning Of the font ☑ | Removal of the font ☐

## Section 12: Proposals for use of the area within and below the gallery section of the church

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Install Curtain To Gallery Space ☑ | Create A 'New Space' Under the Gallery ☑ | Re-Open The External Door ☑ | Create Second 'New Space' ☑

## Section 13: Proposals for internal works identified in our 2023 Quinquennial Report

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Plasterwork ☑ | Glazing ☑ ☑ | Cracking ☑ | Flooring ☑

## Section 14: Proposals for external works identified in our 2023 Quinquennial Report

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

General Maintenance ☑ | Brick/Stone work ☑ | Moss ☑ | Metalwork ☑ | Roofing ☑ | Woodwork ☑

## Section 15: Proposal to establish a Community Heritage Zone

**Please tick the box of the option or options which best matches what you think will give us the best choice.** None of the options below ☐

Install a theatre curtain to zone off this space ☑ | Allocate the second 'new space' for Heritage ☑ | Purchase associated equipment ☑

Install wall mounted convection heaters ☑ | Carpet the heritage area and links to altar area ☑ | Maintenance to spriral staircase ☑

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The boiler is gas fired — Basic information and/or comment will be within a purple box.

Do we need to make changes? — The decision to be made will be within a dark red box.

If your decision is YES, put a tick in the Green Box.

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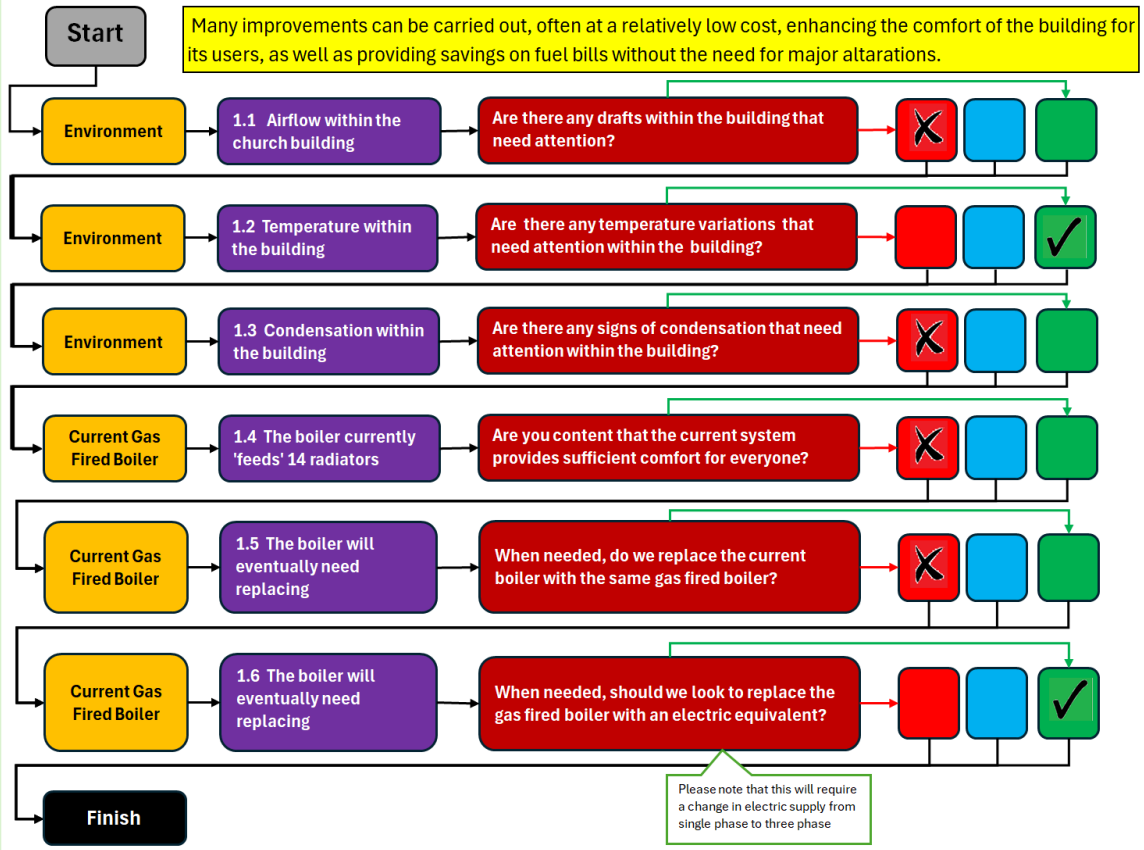
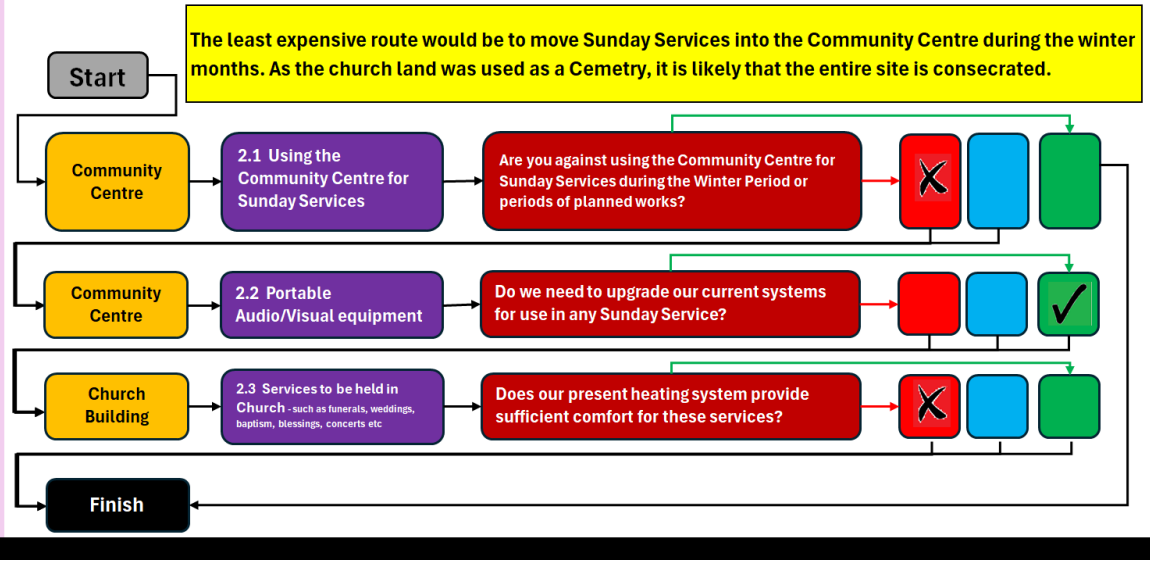
If you are unsure, or need more information, put a question mark in the Blue Box.

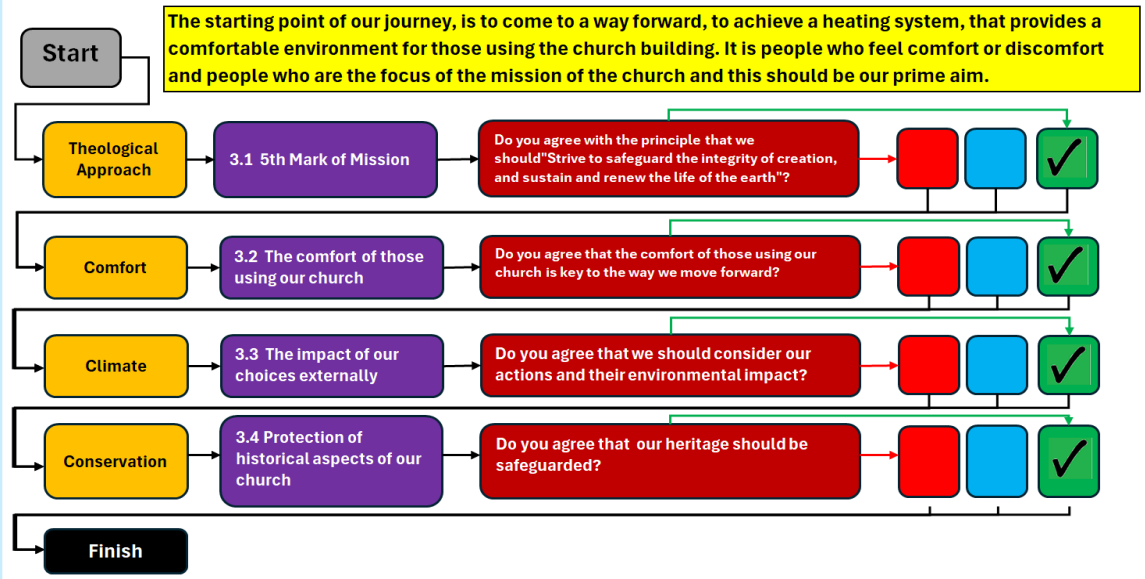
## Section 1: How can we make the most of what we already have?



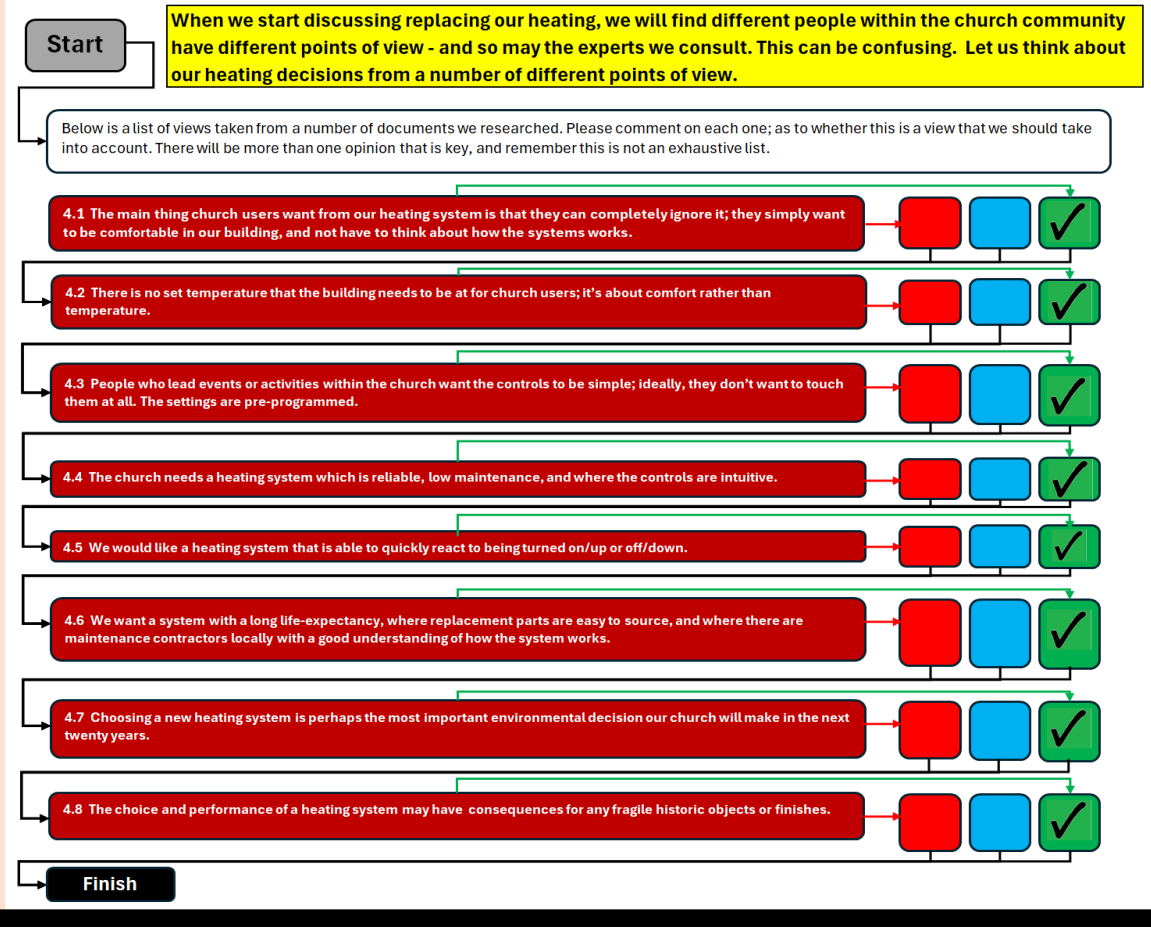

## Section 2: Are we comfortable using the Community Center for Sunday Services during the winter months?



## Section 3: Which key drivers should direct the way we move forward with our heating system?

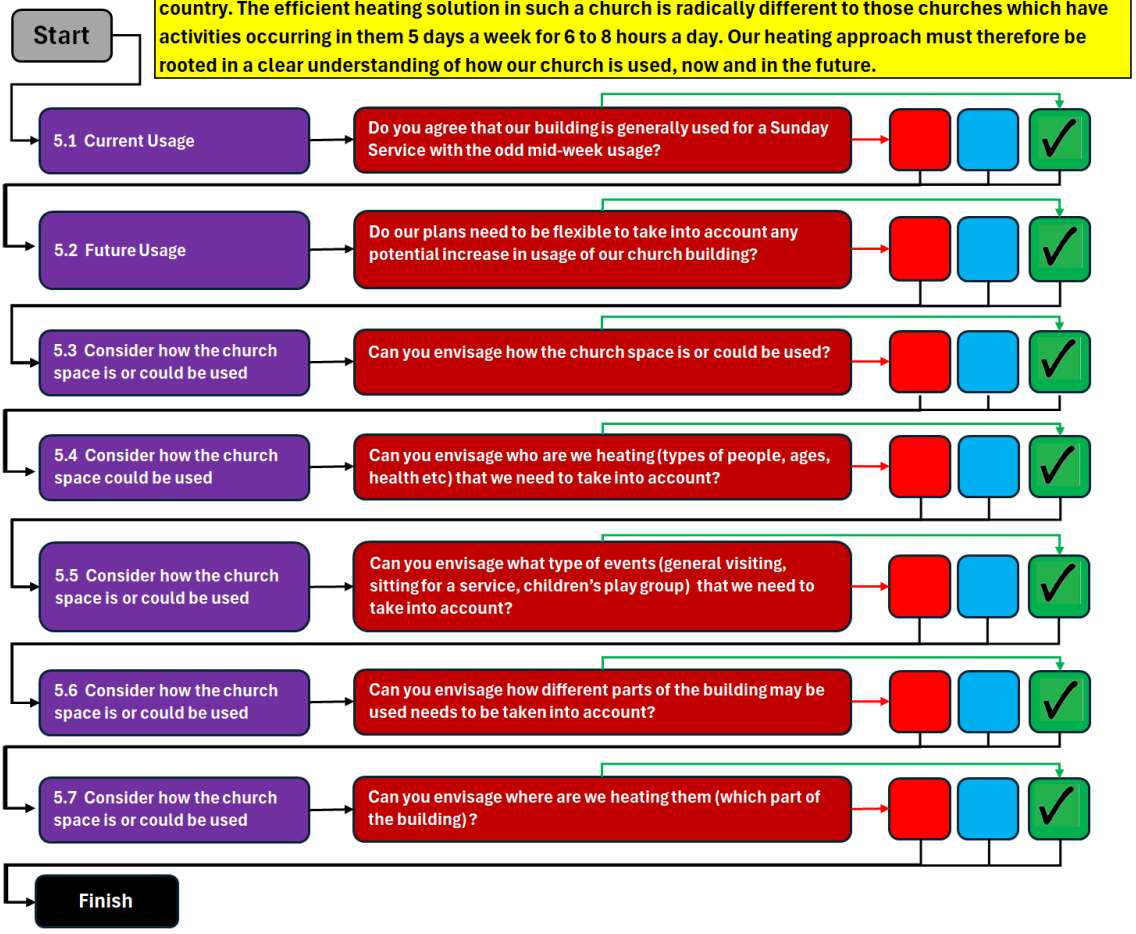



## Section 4: What approach(es) should we take with our heating system?



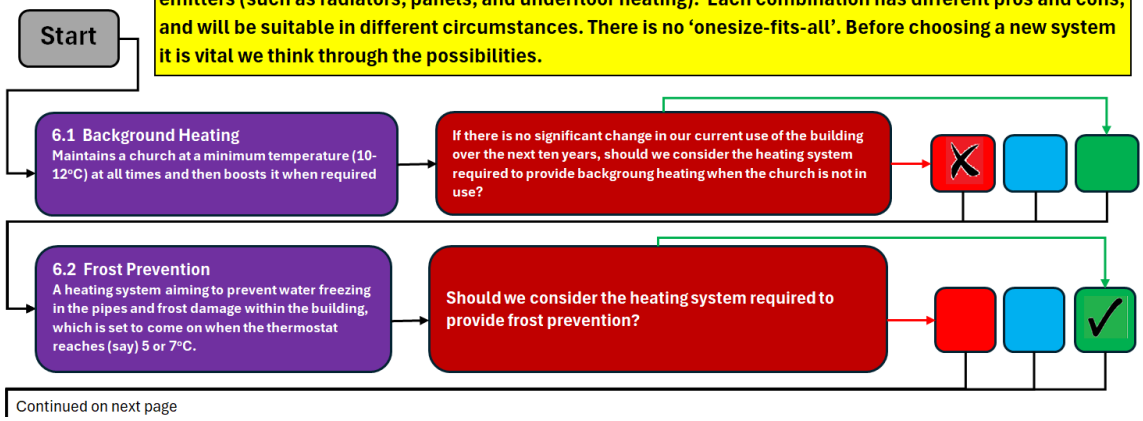
## Section 5: What currently happens in our church building and ideas for its future use

The heating solution must be designed around our church's use and nature. Churches which get used for services on a Sunday with the odd hour mid-week use make up a substantial number of the churches in the country. The efficient heating solution in such a church is radically different to those churches which have activities occurring in them 5 days a week for 6 to 8 hours a day. Our heating approach must therefore be rooted in a clear understanding of how our church is used, now and in the future.




## Section 6: What is the best way to heat our building?

There are a wide range of approaches to heating, from space heating the whole church to no heating at all. They combine different objectives, different heat sources (such as gas and electricity) and different heat emitters (such as radiators, panels, and underfloor heating). Each combination has different pros and cons, and will be suitable in different circumstances. There is no 'onesize-fits-all'. Before choosing a new system it is vital we think through the possibilities.



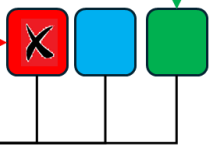

Continued on next page

**6.3 Conservation Heating**
Aims at preserving historic interiors susceptible to damage through environmental changes.

We spoke with Adrian Fox, Environmental Sustainability Officer, Cathedral and Church Building Department. His opinion is that the only item for us to take into consideration is the church organ.

The Institute of British Organ Building report that heating systems that heat up and cool down slowly (no more than 2°C/h) are best for the fabric of the building, and for the organ. Their prime concern is the control of relative humidity – which in their opinion causes greater damage if relative humidity falls outside of 55% to 75% range

**Should we consider the heating system required to provide conservation heating?**



**6.4 Space Heating**
Aims to heat the air of the church, so that the whole space is warm

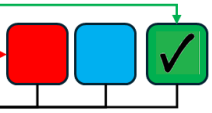
**As space heating is our current mode of heating the building, are there any changes that could be made to make the system more effective?**

**6.5 People Heating**
Aims to keep people comfortable, where they are

**Most people who come into the church, enter in a "warm state". If the ambient temperature is below 20°C, the body will start to cool. The aim would be to try to keep the temperature in the persons' immediate proximity as close to 20°C as we can.**

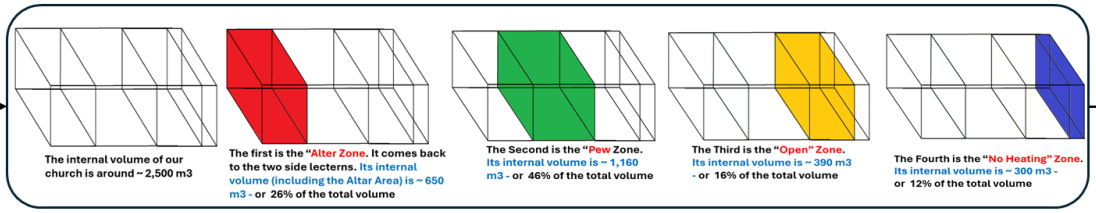
**If we can achieve this, then for the time the local ambient air is at 20°C, the person will feel comfortable in their surroundings.**

**Should we consider the heating system required to provide people heating?**



**6.6 Winter Church**
Aiming to create a space within the church which can be kept warm enough to use during winter, without needing to warm the whole space. The space is partitioned off, and heated, whilst the rest of the space is left unheated or on frost prevention.

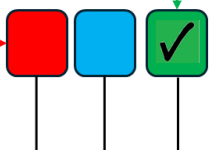
It is being suggested that we consider looking to 'divide' the internal volume of our church into four separate zones. The details are found in the box below.




It is being suggested that we use theatre curtains to provide the partitions.

They can be pulled back to increase internal area if required.
They can be partially pulled back to form a pathway between zones

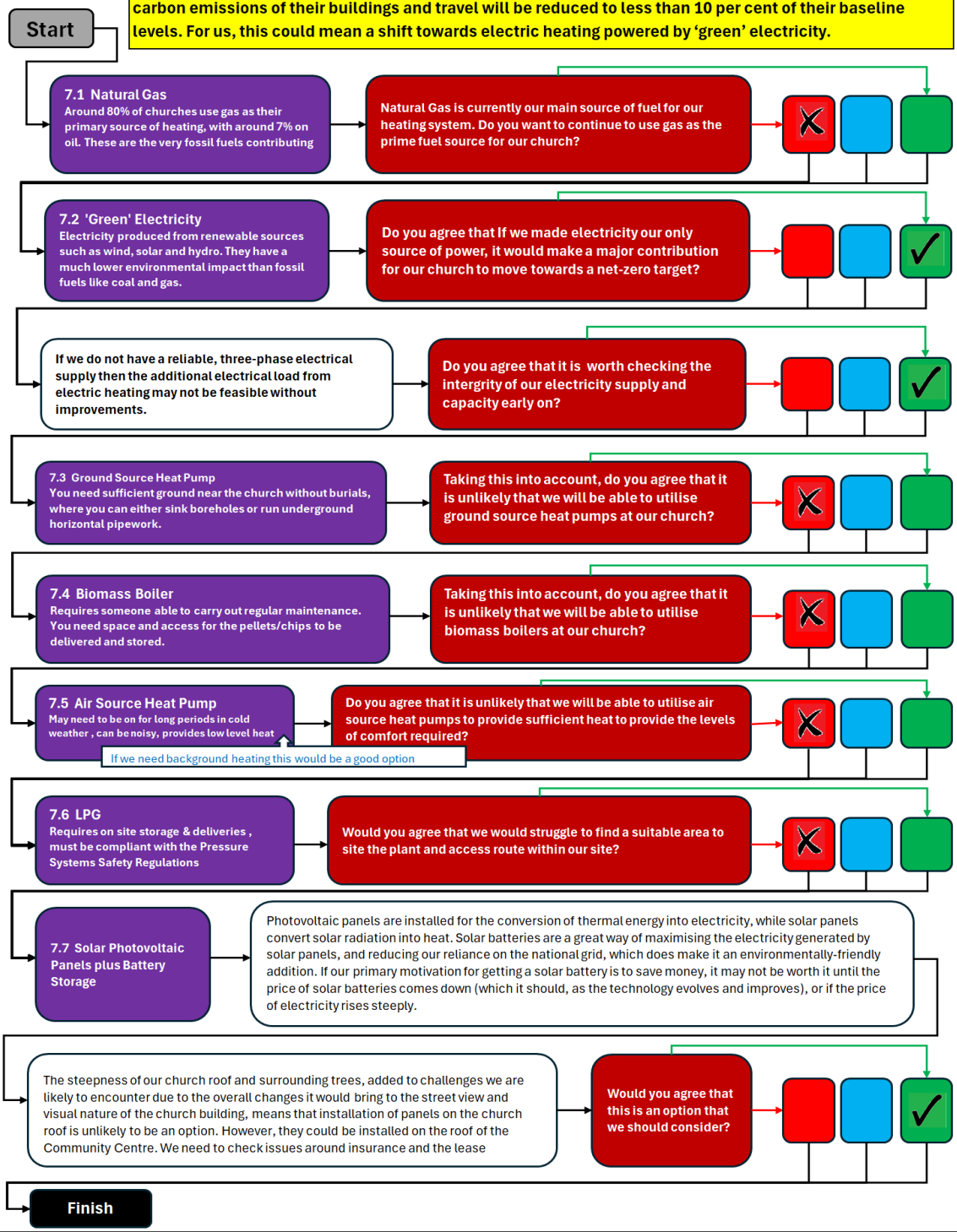
**This approach is likely to give us the highest flexibility - as it utilises different parts of the heating system listed above. Should we consider the heating system required to provide a 'winter church approach'?**



**Finish**

## Section 7: Which fuel(s) should we be using?

**The General Synod of the Church of England voted in February 2020 for the whole of the Church of England to achieve net zero carbon by 2030. The vote recognised that the global climate emergency is a crisis for God's creation and a fundamental injustice. For the Church of England, being net zero carbon means that the carbon emissions of their buildings and travel will be reduced to less than 10 per cent of their baseline levels. For us, this could mean a shift towards electric heating powered by 'green' electricity.**



## Section 8: Which heat emitter(s) should we be using?

**A heat emitter is any product that sends out heat. Heat emitters are used to distribute heat around a building to maintain required set points within spaces. Heat can enter a space through:**
**a) Conduction - The transfer of heat through collisions of particles and movement of electrons within a body**
**b) Convection - The movement of molecules within fluids such as liquids and gases**
**c) Radiation - The emission, or transmission of energy as waves through space or a material.**
**It is likely, as there is not a one size fits all, that we may need a combination of heating emitters.**

**Start**

**8.1 Radiators**
The most familiar type of heat emitter and usually offer the best mix of radiant heat and convective heating of the air in spaces. Existing radiators, if of great age, may be of great historical importance as well as being quite suitable for re-use if free from leaks.

→ **Should we continue to use radiators at church as the heat emitters for our heating system?** → ✓

**8.2 Trench Heaters**
Use a piped (or electrical) heat emitter located within the floor to heat the space above via convection.

→ **As installation requires some disruption to the floor (unless existing trenches are available), and location is important to minimise the ingress of dirt, is this unlikely to be an option for our church?** → ✗

**8.3 Fan Convectors**
Uses a fan to draw the room air across a pipe coil or electrical element to heat the space by convection.

→ **As they have a fast response time (the time taken to heat a space) , is this an option we should look at?** → ✓

**8.4 Radiant Heating**
Transmits infra-red energy, which is converted to heat energy when absorbed by objects, such as walls, floors or ceilings, or the occupants within the space.

→ **Should we consider this, as it is efficient: only heats the objects within the space and not the air. It provides thermal comfort: heat is instant and when it is required?** → ✓

**8.5 Underfloor Heating**
Provides good thermal comfort and is good for keeping a constant temperature within a space. It is costly to install and is slow to respond to changes in heat demand within the space.

→ **As this emitter is not ideally suited for spaces with intermittent occupation and changing heat demands, plus the major floor works required, should we consider using it?** → ✗

**8.6 Electrical Space Heaters**
The benefits of this type of heating is that it provides localised heat and as you only have to heat the occupied spaces, they tend to heat up quickly

→ **Should we consider this type of heat emmiter?** → ✗

**8.7 Church Pew Heaters**
These heaters can be convective or radiant. They are intended to provide local electric heating to warm the occupants rather than heat the entire church.

→ **As the advantages of this type of heating are likely lower running costs and associated carbon emissions, and some flexibility in the switching off of individual pews, should we considering this as an option?** → ✓

We currently have 14 radiators and two space heaters within a church. We should also consider:
a) Do we keep them in their current positions (currently at the front and back of the church building – but nothing in the middle section of the building where the congregation currently sit)? ✗
b) Do we move them to a different location to provide a more balanced heat input over the entire building? ✓
c) Do we replace our current units with modern, more efficient units? ✓
d) Do we remove them completely, along with the boiler and look at replacing them with something else? ✗

**Finish**

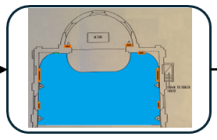
## Section 9: Proposals for when the altar Zone is used for a service

**Having worked through the basics of heating systems, we can now move into looking at developing specifics plans within each part of the church.**

Start

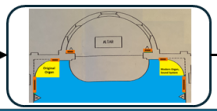
**The first area for consideration is from the front of church, including the altar area, extending back to a position between the first and second side windows – or in line with the two side lecterns.**

**9.1 Carpet The Entire Area**
Carpeting over concrete floors can be a quick, affordable and smart way to warm up a cool room, reduce noise and turn a bland and uninspiring space into somewhere warm and inviting. We would also re-



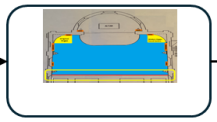
Do you agree that this is an option we should consider?

**9.2 Relocate The Digital Piano and Sound System Controls**
This is to make space at the front for other items.



Do you agree that this is an option we should consider?

**9.3 Install Theatre Curtain**
This is to establish our first heating zone.
Note: it is not known what this will do to the accoustics.

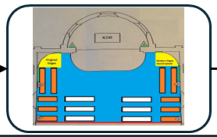


Do you agree that this is an option we should consider?

**9.4 Reposition Pews**
This will give us a seating capacity within the Alter Zone of 78 people – which would have accommodated 88% of all services taking place over the last 12 months. This would mean removing/repositioning the two side lecterns.


Do you agree that this is an option we should consider?

**9.5 Under Pew Heating**
Fitted to the external pews (orange in the drawing to the right), but not the internal pews (white (ditto)). This takes into account electrical tray ducting – already in place – and removes the need to bury power cables underground.



Do you agree that this is an option we should consider?

**9.6 Portable Heated Seat Pad**
Three levels of heating modes are available. The heating pad has a special rechargeable storage bag, so you can conveniently protect the mobile power supply. It is equipped with high-density memory foam pad, which feels like sitting on the sofa. IThis is best described as to how it feels sitting on a heated car seat.

Do you agree that this is an option we should consider?

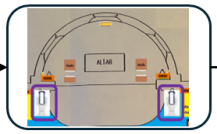
**9.7 Move The Two Stalls, Pulpit and Reading Desk**

Do you agree that this is an option we should consider?

**9.8 Install Infra-Red Heaters**
These are to keep those leading our service comfortable where they sit or stand in the Altar area.


Do you agree that this is an option we should consider?

**9.9 Install Convection Heaters**
Used to help bring the main areas to a reasonable temperature before services start. It is not planned to use them during the service due to their noise and the fairflow caused by the fans can cool a person.




Do you agree that this is an option we should consider?

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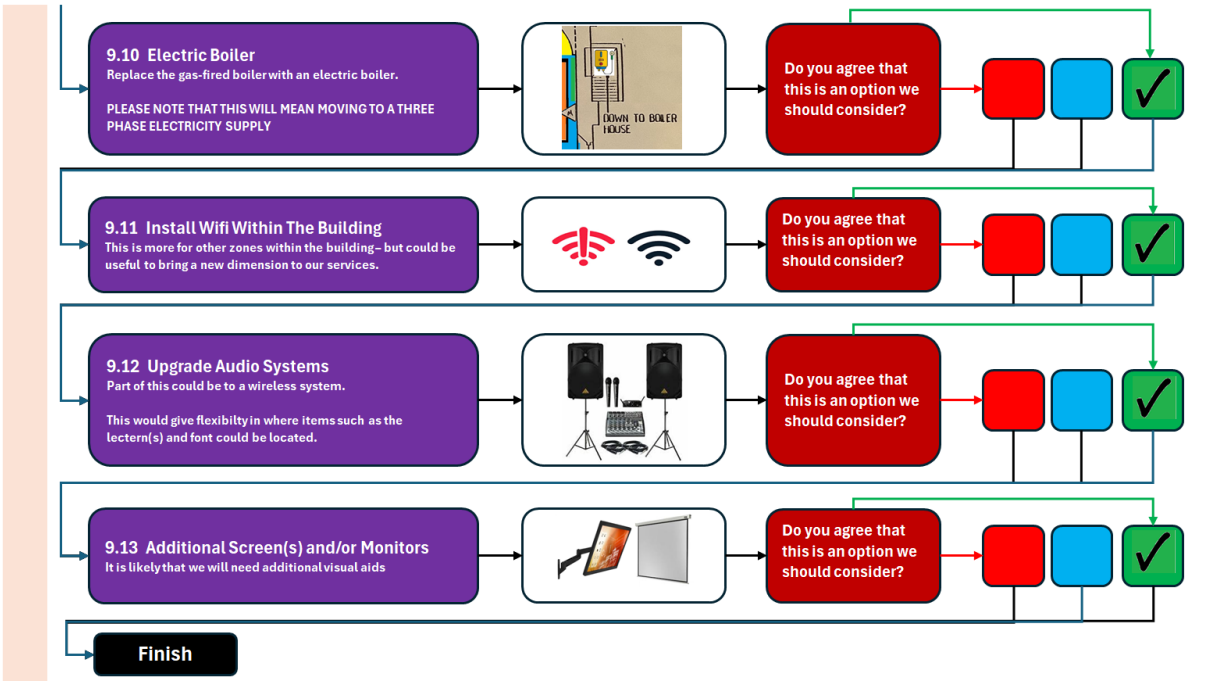
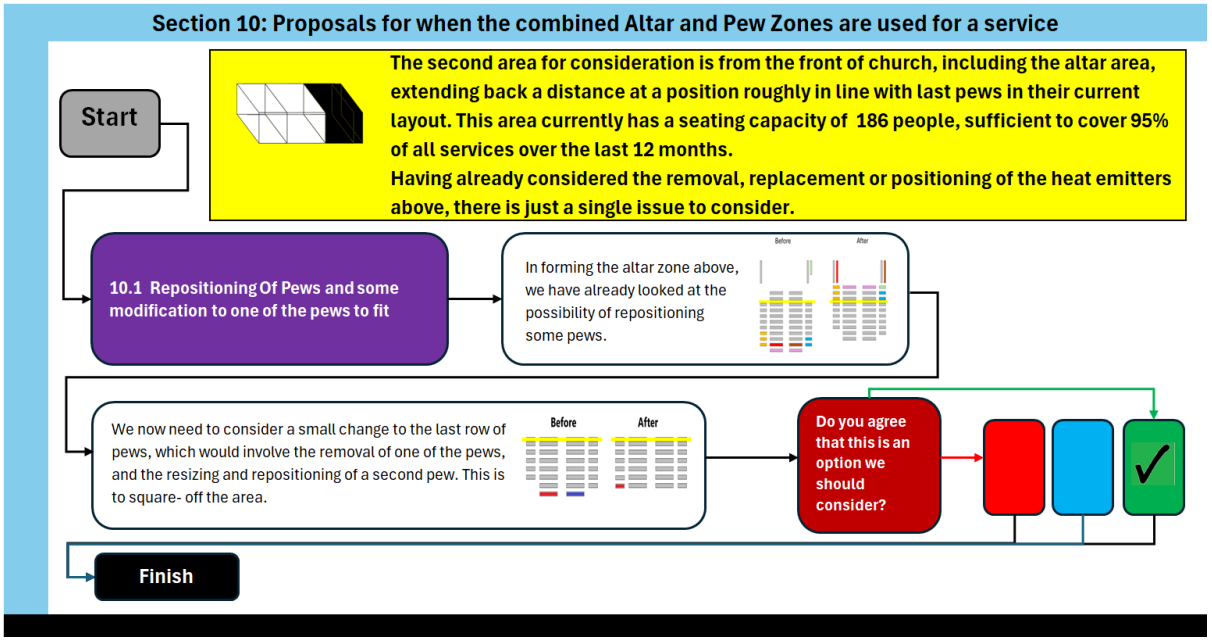
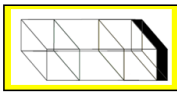

9.10 Electric Boiler
Replace the gas-fired boiler with an electric boiler.
PLEASE NOTE THAT THIS WILL MEAN MOVING TO A THREE PHASE ELECTRICITY SUPPLY
DOWN TO BOILER HOUSE
Do you agree that this is an option we should consider?
9.11 Install Wifi Within The Building
This is more for other zones within the building– but could be useful to bring a new dimension to our services.
Do you agree that this is an option we should consider?
9.12 Upgrade Audio Systems
Part of this could be to a wireless system.
This would give flexibilty in where items such as the lectern(s) and font could be located.
Do you agree that this is an option we should consider?
9.13 Additional Screen(s) and/or Monitors
It is likely that we will need additional visual aids
Do you agree that this is an option we should consider?
Finish


Section 10: Proposals for when the combined Altar and Pew Zones are used for a service
Start
The second area for consideration is from the front of church, including the altar area, extending back a distance at a position roughly in line with last pews in their current layout. This area currently has a seating capacity of 186 people, sufficient to cover 95% of all services over the last 12 months.
Having already considered the removal, replacement or positioning of the heat emitters above, there is just a single issue to consider.
10.1 Repositioning Of Pews and some modification to one of the pews to fit
In forming the altar zone above, we have already looked at the possibility of repositioning some pews.
Before
After
We now need to consider a small change to the last row of pews, which would involve the removal of one of the pews, and the resizing and repositioning of a second pew. This is to square- off the area.
Before
After
Do you agree that this is an option we should consider?
Finish

## Section 11: Proposals for when the majority of the church is used for a service



The third area for consideration is from the front of church, including the altar area, extending back a distance at a position in line the gallery. As is current practice, we will bring in additional temporary seating to cover the larger service.

Start

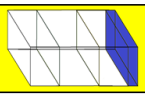
11.2 Repositioning / Removal of Font

Guidance on fonts can be found at: https://www.churchofengland.org/sites/default/files/2024-05/fonts_v2_may_2024_0.pdf

Do you agree that this is an option we should consider?

Finish

## Section 12: Proposals for use of the area within and below the gallery section of the church



The fourth area for consideration is that located within and below the gallery section of the church.

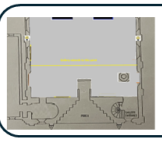
Start

12.1 Install Curtain To Gallery Space

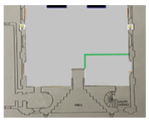
The volume within this section is ~5% of the total volume. It is highly unlikely that it will ever be used for its intended purpose. The curtain would stop warmed air being wasted.

Do you agree that this is an option we should consider?

12.2 Create A 'New Space' Under the Gallery



It is proposed that we form a new space under the gallery which will be self contained. It will have its own furniture, carpet and heating.



It's walls and door would be made from standard off-the-shelf safety glass panels.

It would be serviced by a combined infra-red heater and light fitting(s)

Do you agree that this is an option we should consider?

12.3 Re-Open The External Door

In talks with the local schools, a common theme is a requirement for a quiet room "off-site" for meetings.

By re-opening the external doorway, and a key code/key, they could gain access without the need for anyone else to have to open up the room. The instant heat from the infra-red emitter would be ideal in this situation.

Do you agree that this is an option we should consider?

12.4 Create Second 'New Space'

The second 'new' space is more for the use of the church.It will help the back of the church look symetrical. It could be used for Sunday School, Tuesday morning prayer group, play area during services, and any adhoc meeting(s). Part of the build will need to ensure access through into the vestry area as a link beyond into the toilets and Community Center.

Do you agree that this is an option we should consider?

Finish

## Section 13: Proposals for internal works identified in our 2023 Quinquennial Report

**We now move into the beautification section of our plans - but it must be stressed this has little to do with heating the building. Our 2023 Quinquennial Report highlights a total of 86 items, of which around 22 concern building maintenance issues that it would be good to address rather than 'papering over the cracks before we decorate.**

**Start**

**Do you agree that we should look to undertake the following works before decorating?**

In addition to the No, ??, Yes boxes, there is an additional judgement that we would like you to make. It is likely that any works adreed will either be need to be phased or that additional funding may be required.

So could you please indicate your opinion on whether the priority for each item is either Low, Medium of High by ticking the relevant coloured Yellow, Orange or Red box.

### 13.1 Plasterwork

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.1.1 | Nave and sanctuary | Carry out repairs to the internal plasterwork to the nave and sanctuary. | £ 1,000 | No | ??? | ✓ | Low | Med | ✓ |
| 13.1.2 | North Wall | Arrange for all cracked render plaster to be repaired. Also carefully remove the Gypsum plaster form the north wall and replace with lime render. | £ 1,000 | No | ??? | ✓ | Low | ✓ | High |
| 13.1.3 | West Wall | The damage to the internal plaster of the west wall does appear to have worsened. Large high level areas of plaster look as though they are due to de-bond from the substrate. | £ 1,000 | No | ??? | ✓ | Low | Med | ✓ |
| 13.1.4 | South West Corner | The internal plaster in the south west corner of the staircase to the west end is suffering badly through damp ingress. Inappropriate cementatious Gypsum plaster appears to have been used for some repairs. | £ 250 | No | ??? | ✓ | Low | Med | ✓ |
| 13.1.5 | North Wall | The inappropriate cementatious Gypsum plaster on the north wall should be carefully removed and replaced with lime based render. | £ 750 | No | ??? | ✓ | ✓ | Med | High |

### 13.2 Glazing

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.2.1 | General Comment | Carry out repairs to the leaded light glazing. (based on £3,000 per window 10 years ago - so double cost) | £ 102,000 | No | ??? | ✓ | Low | ✓ | High |
| 13.2.2 | General Comment | Carry out additional window repairs. | £ 2,500 | No | ??? | ✓ | Low | ✓ | High |
| 13.2.3 | General Comment | As mentioned in previous reports, the windows and glazing throughout the church are likely to require some repair works. The leadwork in some windows is weakening and bowing. | £ 2,500 | No | ? | Yes | Low | ✓ | High |
| 13,2,4 | South West | A piece of glass is missing from the west side of the south west window. | £ 300 | No | ??? | ✓ | Low | ✓ | High |
| 13.2.5 | General Comment | It is recommended that a glazing conservator visit and inspect the condition of the glazing. | £ 1,000 | No | ??? | ✓ | Low | Med | ✓ |

### 13.3 Cracking

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.3.1 | East Wall of Sanctuary | As mentioned in previous reports, the settlement cracks in the internal plaster do not make pleasant viewing. There are a number of cracks in the east wall of the sanctuary. | £ 2,000 | No | ??? | ✓ | Low | ✓ | High |
| 13.3.2 | East End of South Wall | The cracks that are evident at the east end of the south wall of the nave appear to have worsened. | £ 1,500 | No | ??? | ✓ | Low | Med | ✓ |
| 13.3.3 | West End of South Wall | Further cracks are evident in the western end of the south wall of the nave. | £ 1,500 | No | ??? | ✓ | Low | Med | ✓ |

### 13.4 Flooring

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.4.1 | Balcony Stairwell | The spalling of the quarry tiles to the ground floor balcony stairwell do not appear to have worsened. | £ 750 | No | ? | Yes | ✓ | Med | High |
| 13.4.2 | Nave | Some of the wood blocks to the areas of wood block flooring in the nave are loose and uneven. | £ 250 | No | ??? | ✓ | Low | ✓ | High |
| 13.4.3 | Side Aisle | The thermoplastic tiles to the side aisles are not a floor finish that is usually associated with a church. It is likely that these contain some asbestos fibres and will need to be removed by a licensed contractor. | £ 1,000 | ✗ | ??? | Yes | ✓ | Med | High |

**Finish**

## Section 14: Proposals for external works identified in our 2023 Quinquennial Report

**Start**

**The second part of our look at the items raised by the Quinquennial Report relates to issues that are mostly external matters**

**Do you agree that we should look to undertake the following works before decorating?**

In addition to the No, ??, Yes boxes, there is an additional judgement that we would like you to make. It is likely that any works adreed will either be need to be phased or that additional funding may be required.

So could you please indicate your opinion on whether the priority for each item is either Low, Medium of High by ticking the relevant coloured Yellow, Orange or Red box.

### 14.1 Metal Work

| | | | | No | ??? | Yes | Low | Med | High |
|---|---|---|---|---|---|---|---|---|---|
| 41.1.1 | Sanctuary Window | Refix the metal protective grilles to the sanctuary windows. | £ 250 | | | ✓ | ✓ | | |
| 14.1.2 | Doors | De-rust all ironmongery and redecorate with black Hammerite paint. | £ 100 | | | ✓ | | ✓ | |
| 14.1.3 | Windows | Carefully de-rust and redecorate the ferramenta of the windows and the frames of the hopper ventilators. | £ 1,000 | | | ✓ | | ✓ | |
| 14.1.4 | Rain Water System | De-rust and redecorate all cast iron rainwater goods. | £ 250 | | | ✓ | | ✓ | |
| 14.1.5 | South Elevation | There is a damaged cast iron ventilation grille at low level in the plinth brickwork of the south elevation. | £ 250 | | | ✓ | | ✓ | |
| 14.1.5 | East Elevation | The metal protective grille to the east window of the sanctuary is loose and requires careful refixing. | £ 150 | | | ✓ | | ✓ | |

### 14.2 Roofing

| | | | | No | ??? | Yes | Low | Med | High |
|---|---|---|---|---|---|---|---|---|---|
| 14.2.1 | Nave and Sanctuary | Refix tiles to the north and south roof slopes of the nave and the sanctuary roof. | £ 5,000 | | | ✓ | | | ✓ |
| 14.2.2 | General Comment | As mentioned in previous Quinquennial Inspection reports, there are a number of slipped and missing roof tiles. Some tiles appear to be lifting, the north slope of the nave roof is in the worst condition. | £ 2,500 | | | ✓ | | | ✓ |
| 14.2.3 | General Comment | It would be worthwhile considering the installation of snowguards (refer to the 2018 Quinquennial Report). | £ 5,000 | ✗ | | | ✓ | | |
| 14.2.4 | Sanctuary | The tiles to the roof above the sanctuary appear to be lifting and some are loose. | £ 1,000 | | | ✓ | | | ✓ |

### 14.3 Woodwork

| | | | | No | ??? | Yes | Low | Med | High |
|---|---|---|---|---|---|---|---|---|---|
| 14.3.1 | External Doors | It is recommended that the external timber doors and frames be carefully cleaned down and treated with Danish oil | £ 200 | | | ✓ | | ✓ | |
| 14.3.2 | General Comment | All fittings and furniture appeared to be in a reasonably satisfactory condition | £ - | ✗ | | | ✓ | | |

### 14.4 General Maintenance

| | | | No | ??? | Yes | Low | Med | High |
|---|---|---|---|---|---|---|---|---|
| 14.4.1 | Rain Water System | It is absolutely essential that all rainwater downpipes, hoppers, gutters and ground channels and gullies are inspected regularly (at least twice a year) and cleared of silt, leaves, debris, small plants, etc.. A monthly inspection should be made of any vegetation growing against or up the walls of the church and this should be immediately removed. During the inspection it was noticed that the channels were quite overgrown and these need to be cleared out. | | | ✓ | | | ✓ |
| 14.4.2 | Rain Water System | Generally the cast iron rainwater goods appear to be in a reasonably satisfactory condition. Some of the upvc plastic pipework had, however, come apart. | | | ✓ | | | ✓ |
| 14.4.3 | Leadwork | The leadwork at the roof junctions with the tower and the gable parapets appear to be in a satisfactory condition. | ✗ | | | ✓ | | |
| 14.4.4 | Below Ground Drainage System | It is understood that this functions satisfactorily. During the inspection it was noticed that some ground gullies were clogged with leaves and weeds. | ✗ | | | ✓ | | |
| 14.4.5 | Monuments and Memorial Plaques | The monuments and memorial plaques are in a reasonably satisfactory condition. When funds permit consideration should be given to getting them professionally cleaned. | | | ✓ | ✓ | | |
| 14.4.6 | Churchyard | The churchyard is well maintained. It is recommended that a report be commissioned on the condition of the trees growing close to the south elevation and specifically identify whether the tree roots are causing some of the settlement/movement. | | ? | | | | ✓ |

Continued on next page

## 14.5 Brick/Stone Work

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.5.1 | South Elevation | Carry out repairs to the cracked brick and stonework to the east end of the south elevation. | £ | 100 | No | ??? | ✓ | Low | Med | ✓ |
| 14.5.2 | East end of south elevation | There is a significant crack through the brick arch and the stonework above the blocked up doorway (at the east end of the south elevation) behind the entrance to the boiler room. | £ | 500 | No | ??? | ✓ | Low | Med | ✓ |
| 14.5.3 | General Comment | Repoint all open joints to the external brickwork and stonework. Also carefully infill the voids in the stonework. | £ | 1,000 | No | ??? | ✓ | Low | Med | ✓ |
| 14.5.4 | North Elevation | The void in the stonework behind the central rainwater downpipe to the north elevation still exists (this was reported in 2018). | £ | 100 | No | ??? | ✓ | Low | Med | ✓ |
| 14.5.5 | North Elevation | There are open mortar joints to the buttress located on the north elevation behind the library. | £ | 100 | No | ??? | ✓ | Low | Med | ✓ |
| 14.5.6 | West Door | There are open mortar joints to the keystone above the west door. | £ | 100 | No | ??? | ✓ | Low | Med | ✓ |
| 14.5.7 | West Door | Point up the open mortar joints to the stone paving adjacent to the west doors (with lime based mortar). | £ | 100 | No | ??? | ✓ | Low | ✓ | High |
| 14.5.8 | West Door | The entrance paving to the west doors is uneven and some stones are cracked. The open mortar joints require clearing out and careful repointing with lime based mortar. | £ | 2,000 | No | ??? | ✓ | Low | | ✓ |
| 14.5.9 | East Gable | Renew the decorated stone cross to the east gable of the nave. | £ | 750 | No | ??? | ✓ | ✓ | Med | High |
| 14.5.10 | East Gable | A large section of the decorated stone cross to the east gable of the nave is missing. | £ | 500 | No | ??? | ✓ | ✓ | Med | High |
| 14.5.11 | North Elevation | A piece of blue brick weathering has broken away from the plinth course on the north elevation. | £ | 50 | No | ??? | ✓ | ✓ | Med | High |
| 14.5.12 | Nort East Buttress | A brick to the east side of the north east buttress has become chipped and a piece is missing. | £ | 100 | No | ??? | ✓ | Low | ✓ | High |
| 14.5.13 | East wall of sanctuary | Sections of low level brickwork have open mortar joints. There is a significant area at the base of the east wall of the sanctuary. | £ | 250 | No | ??? | ✓ | Low | Med | ✓ |
| 14.5.14 | West Gable | The coping stones to the west gable (north and south slope) are chipped and a few of the mortar joints are open. | £ | 300 | No | ??? | ✓ | Low | ✓ | High |
| 14.5.15 | West Gable | The decorative sandstone medallions are badly eroded. | £ | 500 | No | ??? | ✓ | ✓ | Med | High |
| 14.5.16 | West Elevation | There are a few voids in the stonework to the west elevation. | £ | 300 | No | ??? | ✓ | Low | Med | ✓ |
| 14.5.17 | South Elevation | The sandstone steps to the door at the west end of the south elevation are badly eroded. | £ | 200 | No | ??? | ✓ | ✓ | Med | High |
| 14.5.18 | West Entrance | The dressed sandstone stonework to the engaged shafts capitals and bases to the west entrance are badly eroded. | £ | 500 | No | ??? | ✓ | ✓ | Med | High |
| 14.5.19 | Tower | Some of the facing bricks to the tower have perished, due to frost action. The west elevation is the worst affected. | £ | 1,500 | No | ??? | ✓ | Low | Med | ✓ |

## 14.6 Moss

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.6.1 | General Comment | Clean off the moss growth to the window cills and the semi-engineering blue brick weatherings to the plinth course. | £ | 500 | No | ??? | ✓ | Low | ✓ | High |
| 14.6.2 | North Elevation | There is moss growth on the semi engineering blue brick weatherings to the plinth course on the north elevation. | £ | 500 | No | ??? | ✓ | Low | ✓ | High |
| 14.6.3 | General Comment | Some of the stone cills to the windows are covered in moss growth. | £ | 500 | No | ??? | ✓ | Low | ✓ | High |

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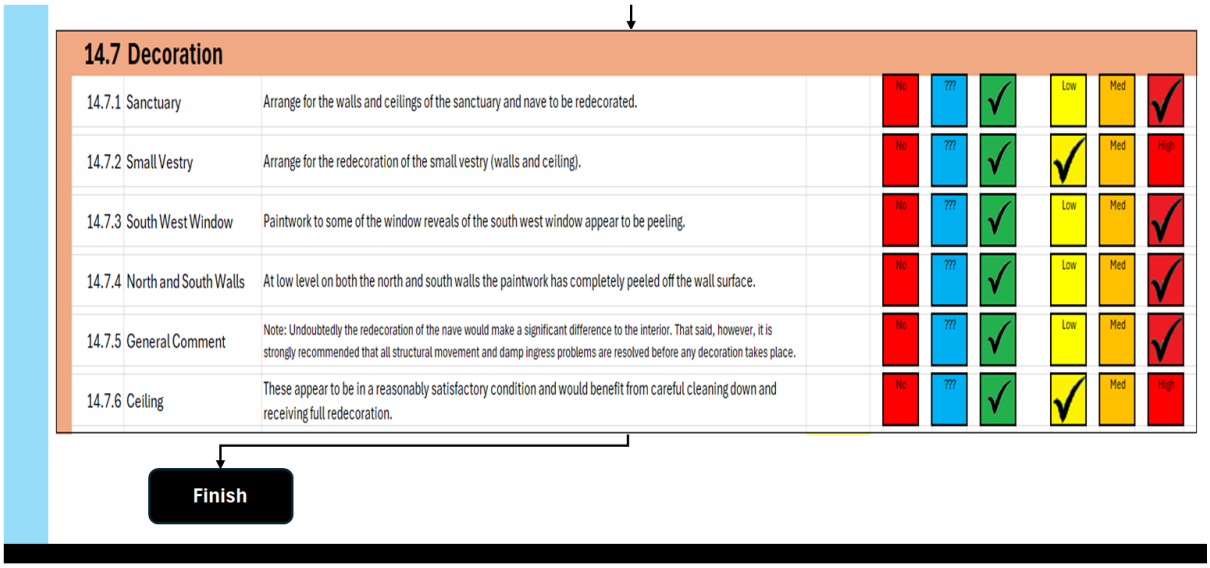


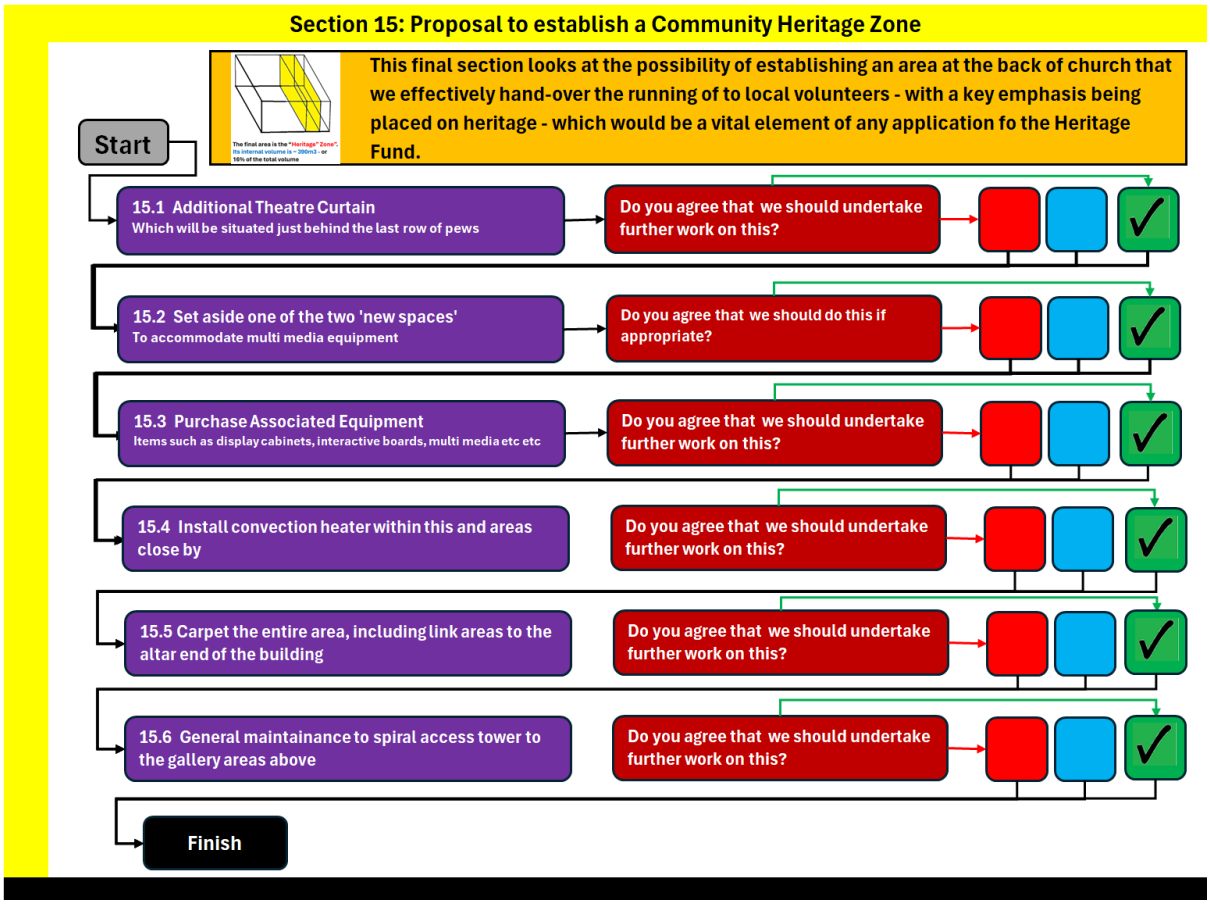


Utilising the area under the gallery for two rooms to host meetings, crèche, Sunday school, and external groups.