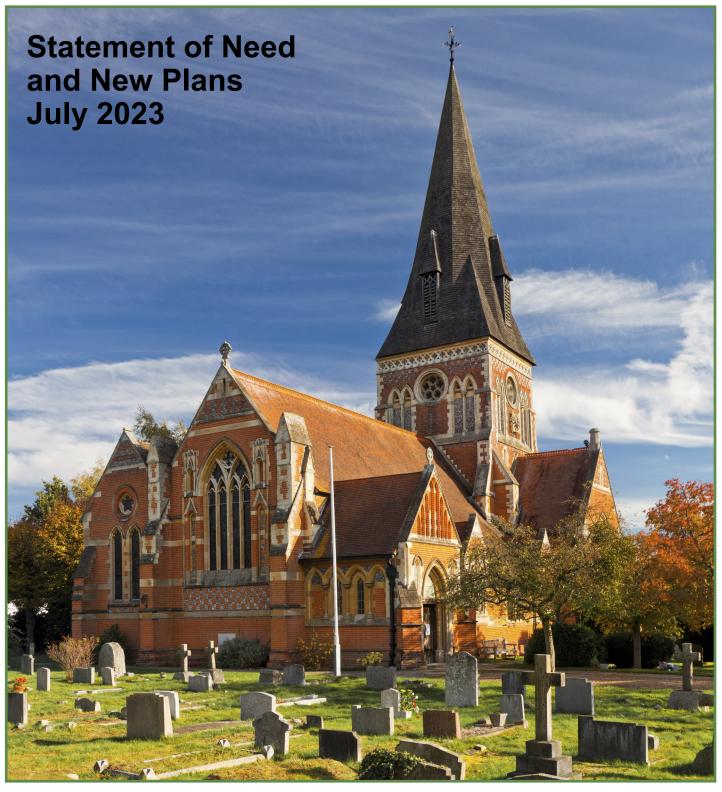
# **Transforming Trinity**

# **One Step at a Time**



# **Holy Trinity Church and Community**

**Sharing God's Love** To live by faith, to be known by love, to be a light of hope



Holy Trinity Church, Church Road, Sunningdale, Berkshire SL5 0NJ Tel: 01344 621886 Email: htschurchoffice@gmail.com www.holytrinitysunningdale.co.uk



# Holy Trinity Sunningdale Church and Community Sharing God's love To live by faith, to be known by love, to be a light of hope

# **Statement of Need** July 2023



# **INDEX**

# Page Number

3	Transforming Trinity - Church re-imagined
4	Our Needs in a Nutshell
5	Part One : Church and Parish
7	Part Two : Vision
9	Part Three : Overview of Existing Facilities
11	Part Four : Our Needs
17	Part Five : Interpreting The Needs
19	Part Six : The Specific Proposals
21	Part Seven : Justifying The Need
23	Part Eight : Project Timeline
25	Part Nine : Design Development and Discarded Options
29	Part Ten : Current and Proposed Activity
31	Part Eleven : Heating and a Sustainable Future
33	Part Twelve : Church Lighting
35	Part Thirteen : Church and Community. Facts and Figures
39	Appendix One : Letters of Support and Encouragement
42	Appendix Two : Seating. (Commentary. The Seating Experiment Collated Feedback. Attendance Numbers.)
45	Appendix Three : 2019 QI Observations and Comments
46	Appendix Four : Energy Audit
47	Appendix Five : Heating Report



# Holy Trinity Sunningdale Church and Community

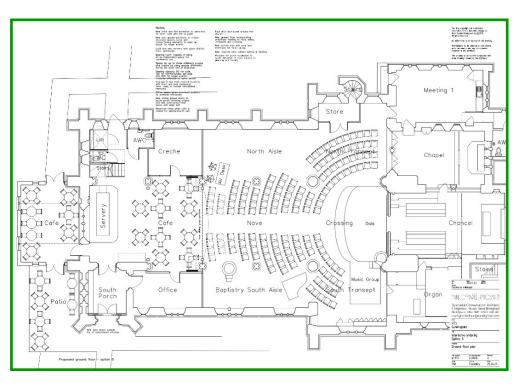
Sharing God's love To live by faith, to be known by love, to be a light of hope



# Statement of Need July 2023

# **Transforming Trinity - Church re-imagined.**

In our Statement of Need we set out the compelling case for an imaginative and creative re-ordering of Holy Trinity, Sunningdale.



Our inheritance is a glorious Victorian church in a village setting. We have a chancel and chapel by G E Street (from 1860) and nave, aisles and transepts by J O Scott (from 1887).

We wish to safeguard all Street's work and imaginatively adapt the large space Scott created.

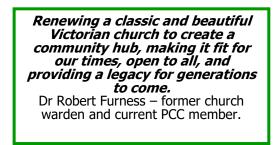
The challenge for our architect Mark Goodwill-Hodgson has been to develop Holy Trinity in a way that celebrates and honours the church building; a way that allows us to

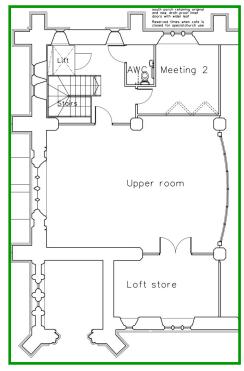
a way that allows us to experience the building in a new way.

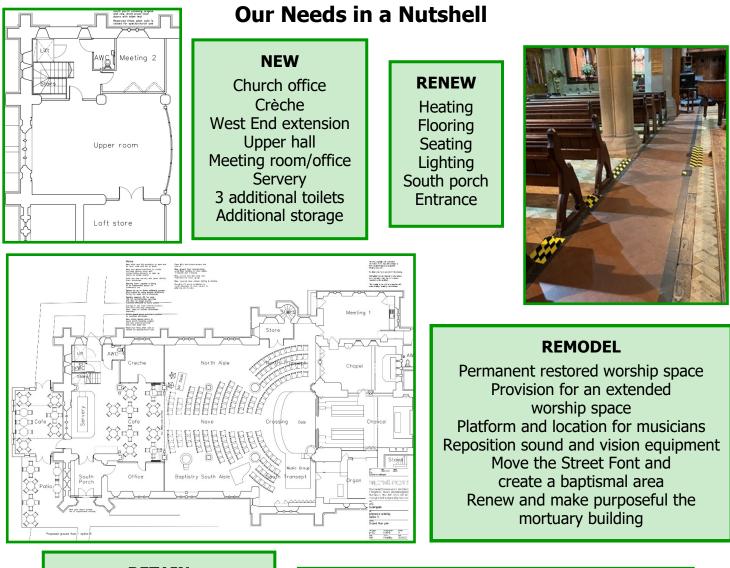
**Transforming Trinity is church re-imagined** with a focus on the worship experience remaining authentic. Mark has skilfully planned an interior that meets the criteria of a missional church committed to the community it serves.

The Victorian architects have given us a legacy we wish to fully utilise as we seek to equip the church with the facilities it has needed for a considerable time. This document will provide the rationale for the preferred option, and the journey we have undertaken to reach this point.

To see Holy Trinity in its setting visit Holy Trinity Sunningdale / Transforming Trinity and click on Drone footage. Or click <u>here.</u>



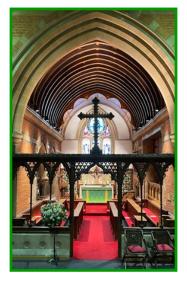




#### RETAIN

The Street Chancel The Street Chapel The Harrison organ The Lectern All Stained Glass All Memorials The Street Pulpit and Font The external overall look of a Victorian Church





#### SUSTAIN

Green energy from solar panels Underfloor heating Air-source heat pump Increased insulation and draft proofing Carbon-neutral



# Part One : Church and Parish

Sunningdale has the feel and character of a village although a parish councillor recently described it as a dormitory for commuters travelling to London. That is true with the train line terminating at Waterloo, Charing Cross only twenty-six miles by road and Heathrow nine miles away. Sunningdale is certainly popular for those who work in London but don't wish to live there.

The parish map adds to the story of Sunningdale's character and popularity for the retired and families. To the south and east are the exclusive manicured Sunningdale and Wentworth golf courses (and there are others nearby).

Chobham Common (a Site of Specific Scientific Interest) and Windsor Great Park are wonderful open spaces; our parish stretches up to Virginia Water.

As a quiet, green, leafy place it is attractive to those who can afford to live here with the added bonus of all that the capital offers a short distance away.

The popular Church of England primary school is hugely oversubscribed and there are a number of successful private schools. Charters secondary school has a national reputation for excellence.

Although not a large urban place Sunningdale has a great many activities available for children. Families value the balance between access to what children require and a countryside feel to the environment.

Within the parish on the north boundary lies Sunningdale Park, the former civil service college which was a discreet place for Prime Minister John Major to host the talks leading to the Good Friday Agreement. After the college closed the Cabinet Office has developed the park for a mix of new housing and redeveloped properties. This will add another 300 households to the community. St John's College Cambridge who own Broomhall Farm have plans for a further 50 properties on their land.



Sunningdale has a number of properties owned by overseas part-time residents who make sure they are in the vicinity for Royal Ascot Week, and there are a number of properties owned by celebrities and properties that were owned by celebrities. One of the Beatles owned Tittenhurst Park and Agatha Christie lived here. If access to London and Heathrow are essential and a quiet pleasant place to live required, then Sunningdale is a natural choice.

Inevitably this has led to it being an expensive area for housing. A recent BBC survey listed the top ten most expensive streets in the country. Nine were in London. The tenth was in Sunningdale. There is though a mix of social housing in the parish. Although the purchase price to buy locally is extremely high, there are local residents and those re-located by the Borough who can enjoy living locally without having bought in.

A great deal of the land locally is owned by St John's College Cambridge, courtesy of King Henry VIII endowing the college with Broom Hall Convent at the time of the dissolution of the monasteries. This has an enduring impact upon the locality and will continue to do so particularly with reference to new housing on College owned land.



Nestled in the older part of the village is the parish church of Holy Trinity and we serve the whole community.

Although the location of Sunningdale has so many advantages we are aware of isolation, particularly among the widowed whose families cannot afford to live locally.

The pandemic exposed those who are vulnerable. Many who could pay their way lost income overnight and the church responded with a foodbank and hardship fund. Those needs are growing.

The stress and exhaustion of high-pressure jobs, commuting and family demands takes a toll. Post-pandemic we have families whose job security and prosperity have been damaged, this too adds to stress. This quiet, leafy, apparently prosperous area masks a great deal of underlying need.

The church mission statement sums up our response - **Sharing God's Love** and Transforming Trinity seeks to equip the church facilities to extend what is possible through the creation of a community hub.

# Part Two : Vision

#### Sharing God's love

For us at Holy Trinity, our mission statement is a present reality and an imperative for mission.

We share the love of God as a worshipping community; a community that is caring, affectionate and living out the grace of God in fellowship with one another.

We also seek to share the love of God with the wider community, and this is expressed in the quality of our welcome, the support we can offer emotionally and practically and the delight we have in sharing our premises, although our premises do limit us.

Transforming Trinity is our response to these limitations.

We are an inclusive church, firmly part of the community where we can provide a sanctuary for troubled minds, a place to have a coffee, a place to pray, a place to meet our friends, a comfortable place for all to enjoy whatever the activity.

Sadly though, the building is not welcoming. It's dark and badly lit. It's cold and the heating solution untenable. We are painfully short of facilities (rooms, kitchen, toilets) and although everyone loves the classic architecture and feel, the uneven floor and freezing draughts minimise any appreciation. It's not a place that is easy to welcome people in, indeed we know people who stay away because of how cold it can be.

Transforming Trinity is about renewing a classic and beautiful Victorian church to create a community hub, making it fit for our times, open to all, and providing a legacy for generations to come. A church where the facilities, rooms and spaces match our aspiration to extend the love of God to all. Our welcome is warm and genuine. We want the building to feel that way too.



We were the couple in the front row left side, just the 2 of us on the row. We were in Windsor on holiday and our hotel had arranged transport to 'a nearby church' and we were delighted it turned out to be your beautiful church.

> Until next time David & Navida Cannon

# **Transforming Trinity**

For a period of time (2003-2012) the restrictions and challenges of the church building were masked by the use of the Coronation Memorial Institute over the road from the church. The small hall, meeting rooms, offices and café in that building facilitated the churches mission and ministry and contributed greatly to the church flourishing. The loss of the building was challenging.

The response and the work done to try and replicate the CMI facilities can been seen on pages 23-28 under 'Project timeline' and 'Design Development'.

Transforming Trinity has now reached the stage to seek outline approval in consultation with the DAC and the Royal Borough of Windsor and Maidenhead (RBWM).

Plans 1650L2010revA and 11revA show an imaginative use of space to create new facilities while simultaneously releasing existing spaces.

Broadly speaking our plan is to return the middle and east end of church to a more authentic design by removing the enclosures around the north and south transepts. The west end of church will have a more radical redesign creating a stunning upper room that benefits from the whole west window. The ground floor will house the café, and social space.



Attention will also be given to repair and restoration, in particular the shaling on stonework noted in the 2019 QI report and the neglected mortuary building.



# **Part Three : Overview of Existing Facilities**

#### 1. Heating. All electric

8 storage heaters 20 Farho panels heaters 4 heaters in the choir pews

Combined output 45.6kW. The calculated heat loss for the building is 157.84kW. (See Heating Report, page 47)

#### 2. Lighting

The Chancel and Chapel lighting has been replaced with modern LED spotlights. There are 13 metal halide floodlights covering the nave, north transept and crossing. (1 has failed, 4 are failing) There are 7 candelabra in the north and south aisles using LED bulbs.

There are 7 candelabra in the north and south aisles using LED bulbs The Nave has 4 non-LED spotlights lighting the roof (not all working). The North Aisle has 4 non-LED spotlights (not all working).

#### 3. Audio-visual system and hearing loop

We have an effective sound system serving the nave and aisles with duplicate speakers in the choir and north transept. The system has four foldback speakers for musicians and those leading. We have a hearing aid loop.

We have two large LED TV screens serving the nave and aisles, and another LED TV screen at the back for those leading the service.

#### 4. Spaces

The main body of the church (nave, aisles, crossing, chancel and sanctuary) are one large open space. Currently there are pews in the nave.

The North Transept can be enclosed (it is our "warm space" and used for the café).

South Transept. Although there are screens to enclose it, these are open above and therefore do not create a separate room.



Vestry – currently used as the church office and children's room on the first Sunday.

The Chapel - currently used as the crèche.

## 5. Seating

We can comfortably seat 300 and currently have pews in the nave, three styles of padded chair and 60 folding chairs.

# 6. Facilities

The church has a single WC that is accessible for wheelchair users. It's on the north-east corner of the church and is accessed through the north transept and vestry.

Servery and Sink. We have a temporary servery at the west end of church installed under licence in 2012. It has no running water. There is a kitchen sink and a dishwasher in the vestry at the other end of the building.

# 7. Storage

We are extremely short of space for storage that doesn't intrude into the worship space. We use the attic room above the crossing for long term archiving and annually used items, however this has to be accessed via a narrow stone spiral staircase which limits the size of items that can be stored there. The space adjacent to the organ pipes is used to store musical equipment.

The west end of the south aisle is a storage corner for cleaning equipment, the flower team, craft supplies, tables, wheelchair and 12 large storage boxes of miscellaneous equipment.

The old boiler room under the church and the organ blower room store redundant pews and two marquees.

#### 8. The Mortuary

We have a small, single storey, narrow building in the grounds that houses redundant pews. It has not seen any maintenance for many years and has been unusable due to the number of pews left in there.



# Part Four : Our Needs

#### New. Renew. Remodel. Retain. Sustain.

Our Transforming Trinity project has led us to reflect on the needs we have as a Parish Church, how we can create a community hub and how we can cherish our building and create a sustainable future.

#### New.

There are new facilities that will aid the mission and ministry of the church. These have been needed for a considerable time.

#### Renew.

Transforming Trinity creates the opportunity to renew aspects of the church and resolve long standing issues. The church heating, the uneven floor, poor lighting, the mixed seating and issues such as the south porch which acts like a wind tunnel.

#### Remodel.

A comprehensive re-ordering creates the opportunity to remodel how the whole building functions. Our lengthy seating experiment under TMRO 2022-071946 led to the conclusion that we wish to worship further forward and the consequences of that are set out below. In essence, the middle and east end of church is being restored to something like the way GE Street and JO Scott set it out.

#### Retain.

The PCC have a list of non-negotiables in the redevelopment; areas to be left as they are, in particular the Street chancel.

#### Sustain.

We want Transforming Trinity to be an example of what can be done in a historic building to become sustainable without compromising its status. We wish to provide the next generations with the facilities to flourish as a church, but also be affordable and sustainable.





An example of our approach is the new red altar covering used for the first time at Pentecost 2023. The church has never had a red altar covering and a needlework group have created this stunning new festival covering.

In style and appearance it is the same as the green, purple and gold coverings we already have, however the cross motif in the centre has been taken from an old front panel (from the original Street altar, right above) that was beyond repair. After consultation with the Diocesan fabric consultant, it was decided to save the cross and make this beautiful new covering.

New. Renew. Remodel. Retain. Sustain.

#### Needs. NEW. Summary of usage.

A new church office A new crèche A new West End extension A small hall – the upper room A small meeting room Storage Toilets Kitchen/Servery Café space both inside and outside (utilising the West End extension) The new office and crèche will release the existing vestry and chapel which currently hou

The new office and crèche will release the existing vestry and chapel which currently house the office and crèche.

#### **NEW Church Office**

The church office is currently used four days per week, this will grow to daily usage.

#### Vestry

A temporary classroom for school visits. Art and craft classes PTA meetings Governor meetings PCC meetings Safeguarding training External groups meetings (ie NCT) Break-out space alongside worship events

#### **NEW Crèche**

Children's use throughout the week

#### Chapel

Midweek communion Church prayer meeting Hosting Morning prayer Fellowship groups Short services to accompany the internment of ashes. Private prayer throughout the week

#### **NEW Upper Room**

Transfer of the activities from the enclosed North transept. Youth group Worship unplugged (ie small worship events not requiring the full AV support) Short courses. Alpha etc. Events previously held in the CMI small hall. Exhibitions

#### **NEW Upper meeting room**

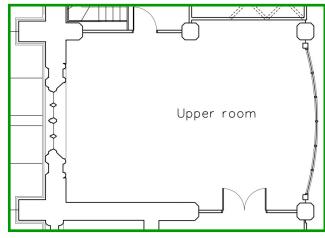
Clergy meetings Office space for youth worker / children's worker

#### NEW Kitchen/Servery/café space

Café space throughout the week Refreshments after worship events Catering for courses and social events. Limited gatherings after occasional offices

#### **NEW West End extension**

Café space throughout the week Non-threatening space into which we can invite guests Meeting space / break out space

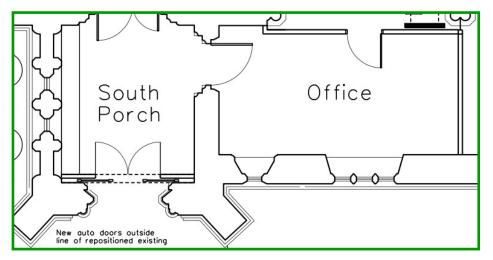






#### Needs 1. New church office and renewal of the vestry as a meeting room.

Positioned at the west end of the south aisle, the church office can act as gatekeeper to the building and is the ideal location. An existing door will allow access to the office from the porch.



The church office is at the heart of all church activity. For some years it was in the chapel. Under faculty it was moved to the vestry as the least worst option for a temporary location.

The office will also double as the clergy vestry. Provision will be made for two permanent work stations and all the necessary office equipment will be housed in this space.

The church administrator will be cared for under the lone-working policy. Access to the office and the church will be controlled by electronic door locks.

We have tested and proved that the space at the west end of the south aisle is not required for seating, indeed most of the space has been used as storage for some years.

Building the office in the south aisle will release the vestry to become a valuable meeting room.

The vestry requires further insulation but with an existing kitchen facility, cloakroom and exterior entrance we envisage this being a busy space and ideal to be rented out to other groups.

Audio visual will be installed in this room.

## Summary of usage

#### **The Church Office**

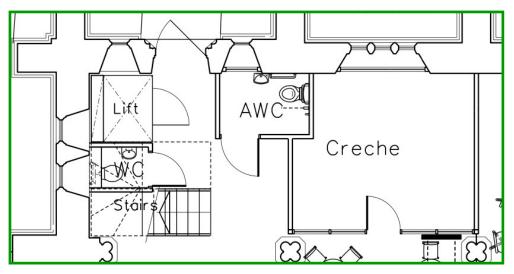
• The office is currently used four days per week, this will grow to daily usage.

#### Vestry

- A temporary classroom for school visits.
- Art and craft classes
- PTA meetings
- Governor meetings
- PCC meetings
- Safeguarding training
- External groups meetings (ie NCT)
- Break-out space alongside worship events

The Vestry used as our Office space

## Needs 2. A new crèche and the renewal of the chapel.



The church has struggled to provide a safe, suitable space for the youngest children.

For some years the enclosed north transept was used as the crèche but the noise and movement adjacent to the worship space was intrusive.

With the north transept being used for a variety of activities the crèche has been in the chapel.

The new crèche will be in the north aisle and is well positioned to meet needs for worship services, the café and school events. Parents have advised that they prefer to be coming and going to their children at the back of church not the front.

The crèche room will be carpeted and designed as a sensory room. Our close collaboration with the primary school has led us to consider how this room might be used when children would benefit from being away from the school site for a period of time, or for high needs children during school services and church events.

Building the crèche will release the chapel as a place for worship and small groups.



The Chapel/Crèche

The chapel requires renewal with roof insulation, draught and sound proofing. It also requires a new heating solution.

#### Summary of usage

#### Crèche

- The crèche will be available during church worship events, school worship and occasional offices.
- Also alongside the café and other social use situations.
- It is envisaged the room may be used for purposes other than a crèche (ie sensory space for school pupils).

#### Chapel

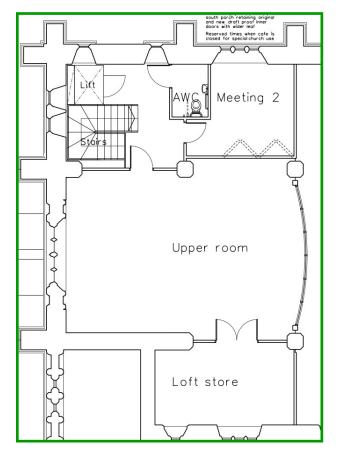
- Midweek communion
- Church prayer meeting
- Hosting Morning Prayer
- Fellowship groups
- Short services to accompany the internment of ashes
- Private prayer throughout the week

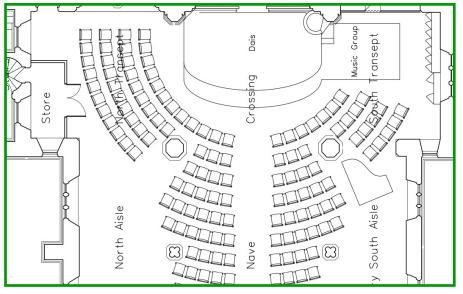
# Needs 3. Upper room and removal of the enclosed transepts.

The church has been discussing a "small hall" since the 1970s and the upper room will finally meet that need.

The long seating experiment in 2022 led to the firm conclusion that the congregation preferred being further forward and to the conviction that the north and south transepts should be opened up with the removal of the doors and screens.

Dispensing with the north transept as an enclosed space deprives the church of the only large 'room' that has had multiple purposes over the years. Latterly this has been the warm space and café.





Shown reorientated the east at the top.

The upper room more than compensates for its loss. The mezzanine floor across the west end of church will create a stunning room lit by the immense west window. The space will be enclosed with a glass screen to the roof, thus avoiding anything 'cutting' through the window. The view across the church will be superb and the upper room almost doubles the space offered by the north transept.

The space will be ideal for a host of church activities and for groups that have used the church facilities before and some of the activities that used the CMI small hall. (See overview of current and proposed activity and spatial use, page 29).

This extract from plan 1650L2011revA shows the stairs and lifts in the NW corner of the church and this position avoids blocking any of the west window.

The upper room will have AV facilities and capacity to stream sound from the worship space (to facilitate an overflow for a very large event.)

#### Summary of usage.

#### **North Transept**

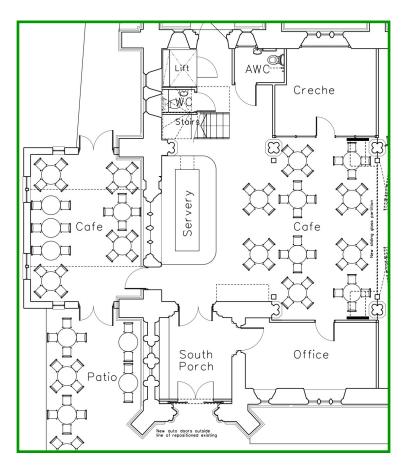
• Returning to an open space for worship

#### **Upper Room**

- Youth group
- Worship unplugged (ie small worship events not requiring the full AV support)
- Short courses. Alpha etc
- Events previously held in the CMI small hall

# Needs 4. Kitchen/Servery, café space inside and in the West End extension

The key activity to everything the CMI building represented was Rendezvous' Café. After the occupancy of the CMI ended the church tried to provide a substitute with a temporary servery at the west end of church, but without equipment and running water it was severely restrictive.



The pews in the north aisle were removed to house the café but despite good intentions it dwindled, not helped by an extremely cold, poorly lit building.

A key need has been the desire to have both an inside and outside social space served by a fully equipped kitchen allowing a café to run and refreshments to be served whenever required.

The West End extension will be constructed in similar materials to the church and will create a more neutral space for guests. We know that some people are tentative about coming into a church building.

Having an open patio, West End extension and easy access to the inside space is a demonstration of the open invitation we wish to make, allowing guests to be comfortable and feel welcomed.

The inside café space can be reconfigured to meet whatever need we have; thus opening the glass screens to the worship space will allow seating for larger events.

#### Summary of usage

- Café space throughout the week
- Refreshments after worship events
- Catering for courses and social events.
- Limited gatherings after occasional offices.
- Outside space for breakout, meetings, gatherings.

#### Needs 5. A small meeting room, storage spaces and toilets.

The full width mezzanine creates the opportunity for a small meeting room above the crèche and a store above the office. It is envisaged that the store will house tables and chairs for use in the upper room.

The small meeting room will be ideal for clergy meetings, ie couples for the occasional offices and the frequent church meetings with wardens and others. The church also has a long history of employing youth workers and children and family workers. This room would make an ideal office.

Our need for additional toilets and storage has also been addressed in the plans. Three new WCs will be in the NW corner. An additional storage unit has been created at the back of the north transept for the foodbank and additional chairs.

# Part Five : Interpreting The Needs

## Liturgy and Worship.

Throughout our discussions and our lengthy seating experiment, we have been mindful of the primary function of Holy Trinity; to be a place for worship. A place that inspires worship.

When being used this way, our desire is that nothing intrudes upon the worship space to distract or compromise the worship. We have noted in many other churches stacks of chairs and tables and stacked aside play equipment. We have to have this ourselves in the current configuration.

Our request was to provide a worship space that could comfortably seat 120 people and expand to 300 for larger events<sup>1</sup>. That numbers may very occasionally exceed this target has been taken into account.



Above all, we want the worship space to be uncluttered and devoted to worship so that the beauty of the church architecture, the windows, the liturgical furniture all lend themselves to reverence and awe.

We have experimented with temporary LED spotlights and have been astonished at the difference coloured light can make to the atmosphere for worship. The way light can enhance the arches and pillars and draw the attention through to the altar has been a revelation<sup>2</sup>.

Our desire for flexibility in changing the size of the space for worship takes into account the range of services we hold as a church, the occasional offices and for the primary and secondary schools.

As well as safeguarding our main space for worship we also wish to keep the chapel as a quiet place to pray and worship.

#### Accessibility.

It was a surprise to realise that the 1974 screens placed around the north transept have doors that are not wide enough for a wheelchair. Bearing in mind the AWC is at the far end of the vestry and one has to go through two rooms to access it, we have taken this on board when considering development.

The reconfigured building will pay attention to access, light levels, warmth, sound quality and visibility.

<sup>&</sup>lt;sup>1</sup>We have studied the attendance numbers and trends since 1997 and our working premise of 120 regularly, 300 occasionally and numbers in excess of 300 very occasionally has proved a sound conclusion. We accommodated a one-off school event with 376 during our seating experiment.

<sup>&</sup>lt;sup>2</sup> For the parish Remembrance service 2022 we flooded the chancel with a poppy red colour. The gathered congregation of regular worshippers and occasional guests all commented on the beauty of the church and how appropriate the colour.

#### **Children and Families.**

The experience of the CMI building demonstrated that suitable facilities are required in a developing church. They don't guarantee growth, but not having them certainly impedes growth.

We have been able to make simple and obvious observations and ask our architect to include them in his design...for example the north transept was used as a crèche, but due to its visibility and proximity to the worship space it was hugely distracting.

We requested a permanent children's room at the back. And near the toilets. And with space nearby for buggies. And soundproof!



The desire for smaller rooms is as much for children and families as it is for anyone else who may benefit. Whether it's on a Sunday morning during worship or at other times, gathering children in the relevant sized room with the facilities required is essential. I currently squash 16 children in half the vestry on the family communion Sunday. No room to do anything.

#### Community Use.

Re-capturing the community hub that was created at the CMI is as important an aspect of Transforming Trinity as dealing with the practical issues of the building and creating the spaces we need.

Over the years we have hosted various groups and classes in the single space we have had available. At various times the north transept was used for an infant ballet class, music with Mummy and NCT classes.

We host the Scouts Quiz Night and they pack 26 tables into the open spaces. A large number of residents have had terrific evenings failing to win the quiz (the clergy have never won!).

We have hosted an Opera which included a 30 piece orchestra.

On a weekly basis we have a café and in Summer guests are either outside in the sun or enjoying the cool inside. In Winter we have made the North Transept into our warm space.



At Christmas time we host the secondary and primary school carol services, the nativity for the nursery who now have use of the CMI building and of course our own services and Christingles. These are immensely popular with parishioners who regard Holy Trinity as their church. It doesn't matter whether it's a service or the quiz night, this is the place they identify with as theirs.

We intend to give more opportunity to share the building with the community knowing that there is a local shortage of spaces to meet.

# **Part Six : The Specific Proposals**

#### New.

# Ground Floor. Please refer to plan 1650L2010revA

- The church office at the west 1. end of the south aisle.
- 2. 3. A crèche in the north aisle.
- Services in the NW corner of the church.
- 4. A new servery on the west wall.
- 5. The social 'café' space at the rear of the nave, extending outside.
- 6. A West End extension creating outside space for the café and a new west entrance way.
- 7. A patio area adjacent to the new extension and south porch.
- 8. Sliding glass panels across the nave to separate the rear social space from the permanent worship area.
- 9. New seating. A permanent dais sculpted to enhance the pulpit.
- 10. Re-positioning the font near the crucifixion window in the south aisle.
- A large storage unit for foodbank and spare chairs in the 11. north transept.

# First floor. Please refer to plan 1650L2011revA

- A mezzanine floor built across the nave and extending over 1. the crèche room and office.
- 2. 3. An AWC adjacent to the stairwell.
- A new upper room benefitting from the west window.
- 4. Storage space over the office.
- 5. A small meeting room/ office above the crèche.

#### **Renewal.** Church heating.

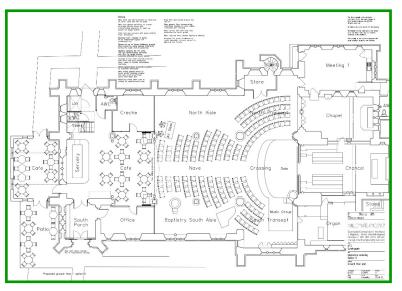
The current system was installed in 2016 and has a total capacity

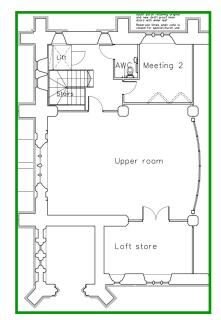
of 45.6kW. A full heating report has been commissioned (see Appendix Five, page 50) and recommends a heat loss of 157.84kW.

Although the initial recommendation is for a hybrid system incorporating gas (20%) and an air source heat pump (80%) the PCC are determined to be completely carbon neutral relying on ASHP alone. Heat will be delivered via underfloor heating (nave, aisles crossing, transepts, mezzanine) supplemented by trench heaters, panel heaters and fans depending on the space requirements. These all run from the same system. Solar Panels will also be installed (subject to permissions) to offset the kW demand (see Heating Report, page 46).

# Lighting.

The natural light level in the church is quite poor and the building requires a better light solution than the expensive to run metal halide floodlights in the nave. The intention is to retain the candelabra that are currently in the aisles and have a modern, LED flexible lighting solution to make the most of the church use and architecture. (See Church Lighting, page 33).





# Flooring.

The floor is uneven and has many trip hazards. The sub-floor is deteriorating and requires attention. In conjunction with the ideal heating solution it seems the right time to grapple with this issue. It's envisaged that the new flooring will incorporate elements of the current flooring, for example the tiling around the font.

# Seating.

The logic of the above two renewals would be to have flexible seating allowing the church to configure the worship area in multiple ways. The 'temporary' removal of pews and the introduction of a variety of padded chairs is a long-standing issue to be resolved.

#### Porch area.

The entrance to church has a classic Victorian feel we wish to retain, but it acts as a wind tunnel. With an appropriate use of glass sliding doors (also retaining the existing oak doors) our aim is to minimise the impact of the weather as people arrive and leave. We also wish to replace the inner doors which have a low lintel. This makes funeral ministry difficult for the bearers.

# Vestry.

Removing the office will allow this space to become a very useful stand alone meeting space.

#### Chapel.

Removing the crèche will allow us to insulate and refurbish this place of worship.

#### And also

The trumpet speakers in the tower to play bells electronically, the exterior lighting, the drive and pathways. Insulating and draft-proofing the organ space. Carrying out 2019 QI items best done economically as part of TT.

## **Retaining - unchanged.**

- 1. The Street Chancel, rood screen, choir stalls and sanctuary.
- 2. The Harrison organ in its current location
- 3. All stained-glass windows and memorials. (Relocating some memorials which would be hidden by developments.)
- 4. The pulpit, font (relocated, see previous page) and lectern.
- 5. The chapel.

#### Remodel.

- 1. Re-position the sound system to serve further forward than it does now.
- 2. Re-position the screens as above.





# Part Seven : Justifying The Need

#### **Process.**

The timeline of this project laid out in Part Eight briefly describes how Holy Trinity gained access to a small hall, rooms, offices and a café which in turn allowed the church to flourish. Of course, spaces and facilities do not automatically lead to church growth or community engagement, but the lack of them does inhibit it.

The Heritage Project (2012 to 2015) intended to replace the CMI facilities and, led by architects Acanthus Clews, a full development programme was followed. Designs considered and discarded are detailed in Part Nine. Although planning by RBWM was granted for the preferred west end extension the project had effectively been halted.

Transforming Trinity was conceived to take forward the development of a community hub but without the urgent pressure the loss of the CMI created. Time for reflection and engagement could take place.

A new design for the west end of church (see Parts Eight and Nine) allowed a free conversation about our needs and, critically, funding. One-to-one visits with the church community allowed the incumbent to measure commitment, priorities and funding leading to the conclusion that a full west end extension was unaffordable. A budget of  $\pounds$ 1.1 million was thought realistic and a re-modelling of the interior a sustainable route forward, with a smaller west end extension.

Lengthy PCC deliberation and dialogue with the church community (not least through the seating experiment) led to a new brief collating the needs we have. These are set out on page 4 (Needs in a Nutshell) and are explored in Part Ten 'current and proposed activity', page 29. The PCC discussed the parts of the church to remain as they are because of their historic importance and liturgical value and what freedom can be offered to the architect in creating solutions.

A fruitful collaboration with architect Mark Goodwill-Hodgson led to plans 1650L2008 & 09 which were submitted in a draft Statement of Needs for a DAC Site visit and a full DAC meeting. Helpful feedback received led to plans 1650L2010revA & 11revA. Plans considered and discarded have been shown in Part Nine.

We believe we have plans that honour the building and allow the experience of worship to be authentic. The most historic aspects of church are retained and the new structures will allow the church and community to experience the building in a new way that doesn't diminish its historic nature.

## The Interior Solution.

It's clear that the needs we have cannot be achieved by simply removing pews and having a large open space. We have no additional land on which to build without covering over graves. The two other buildings nearby (Hope Centre and Village Hall) are either fully booked or are being used for worship and other activities when we might require space. The solution is to create what we need ourselves.

Our budget and our long-standing issues (flooring, lighting, heating) lead to the obvious conclusion that a creative adaption of the interior is the way forward with a modest extension at the west end providing an imaginative outside space and alternative entrance. We aim to resolve the issues we face and provide the additional spaces without diminishing the experience of being in Holy Trinity.

Creating a new office releases the vestry, creating a new crèche releases the chapel. The mezzanine helps delineate the worship space and social space on the ground floor and the upper room replaces the north transept with a bigger space for multiple purposes. The additional small meeting room will be of great benefit and the West End extension will be the visible exterior space for the café, a space for meetings and gatherings and as an alternative entrance.

#### Impact.

The design places the worship space much further forward than where it has crept back to over the years. The removal of the enclosures round the transepts will allow worshippers to experience the church more as it was designed by Scott, with all the new rooms and services behind where worshippers sit. A modest platform, new imaginative lighting, flexible seating, effective heating and a safe, flat floor will allow worshippers to enjoy the church to the full in their worship.

The mezzanine floor across the west end is a radical intervention in the building, but not unique, many churches have used their height to provide additional space. The design we propose will place the new structures in the last two bays of the west end and the glass panels between worship and social space will help delineate the two areas.

Although the mezzanine inevitably reduces natural light on the ground floor, the lighting study and design shows the minimal impact upon the church, indeed the upper room will benefit enormously from the west window and the regular worship space will continue to receive light from this source.

Our seating experiment has demonstrated that we can successfully reduce the volume of space for seating without reducing the capacity we plan to accommodate.

Although the design changes the experience and appearance of the church at the west end, the gain of a beautiful upper room and the facilities created will more than compensate for any loss.

#### Mitigation.

The PCC's determination to keep the Street chancel and chapel, pulpit, font and lectern and restore the front of the church to something like its previous layout are a significant sign of their attitude towards making sure the church remains authentically a Victorian building of significance.

Although solar panels are sought and impact the exterior appearance, they are essential to support a modern heating solution that will remove all the ugly heaters from around the walls. How can we lead by example if we place appearance over sustainability?

The structures at the west end will change that part of the building significantly, but the beauty of the upper room and the beautiful view across the rest of the church will make it gallery like. It will allow the church and community to experience the building in a new way.

With imaginative and sympathetic LED lighting, the architecture and structure of the building will be fully appreciated and the gloom of the interior transformed.

All the stained glass will be retained of course and all the memorials, with those impacted by these changes finding places of prominence elsewhere. We shall safeguard the sculpture of Prince Victor making sure it is fully visible and well lit.

Although new furniture is envisaged, some pews will be kept as a reminder of the church's heritage and the new storage capacity will leave the worship space free of stacked chairs, tables and clutter.

# **Part Eight : Project Timeline**

# Background

1974	First development. The enclosed north transept.
1987	A booklet was produced for the 100 <sup>th</sup> Anniversary celebration of the new nave. In this booklet the need was expressed for " <i>a small hall, choir vestry and parish office</i> ."
2003	Holy Trinity acquired the lease to use the Coronation Memorial Institute building on Church Road gaining access to a small hall, rooms, offices and opening Rendezvous café. When the phrase "Community Hub" is used, it's the experience of the CMI being referenced.

## **Heritage Project**

2012	The loss of the CMI due to the lease ending and a decision not rates. Archdeacons' licenses granted to build a temporary serve the pews from the north and south aisles. The offices relocated ran in the north aisle. Planning application to RBWM (06/2012) portaloos approved (not actioned – portacabins found to have a	ery at the west end, remove I to the south aisle, the café for 2 portacabins and asbestos).
09/2012	Acanthus Clews appointed to carry out a feasibility study, conductions for consideration. Informal consultation with DAC through	ucted surveys and present ighout.
06/2013	Acanthus Clews appointed to carry project forward.	Photo mack up
04/2014	DAC site visit. Meeting chaired by Ven. Olivia Graham with Victorian Society attending.	Photo mock-up of west end extension 07/2014
07/2014	Heritage Project fully launched. <b>Cost of proposed works</b> <b>£2million.</b> Project included the complete internal refurbishment of the church, underfloor heating, and a new extension at the west end of the church. (see photo)	
10/2014	Funding received & pledged less than £12,000. Architects advised of the project halting end of 2014. Project costs £82,000. A full faculty was not submitted to the DAC.	
08/2015	RBWM permission for extension granted (now lapsed).	
2016	New heating installed. <sup>1</sup>	I THE AVERAGE AND
09/2016	Incumbent leaves. Vacancy through to July 2017.	

# **Transforming Trinity**

02/2019	with a brief to re PCC with a refree community. NB	e-visit the fea sh of ideas a - <i>the conclus</i>	ed to the PCC. Architect Mark Goodwill-Hodgson consulted sibility studies & proposed Heritage Project and report to the nd a design to facilitate a renewed discussion with the church <i>ions reached by the project team and DAC during the</i> ge Project were to be taken as the starting point for external		
03/2019	Mark's ideas and made and develo		issed at PCC. A new West End extension. Suggestions were		
A new west e	nd	05/2019	PCC Away day. Mark's second design accepted as a starting point for visiting the congregation one to one.		
03/2019		06/2019	Informal meeting with DAC officer for advice. Further designs and illustrations sought. Launch booklet began development. <b>The project was costed at £2,018,246</b>		
4-8		2020	Transforming Trinity launch postponed - Covid		
2021/22			One to one visits begin. ( <i>subject to covid precautions.)</i>		
			The level of disquiet that resulted in the heritage project being stopped needed to be resolved. Personal visits were the answer. This allowed for conversation about HP, discussion around priorities and funding. An overwhelming commitment to a 'Community Hub' was confirmed.		

<sup>1</sup> With the Heritage Project not going ahead, the heating issue still had to be resolved. A faculty was granted to install the current system. The installation was completed in October 2016.

<sup>2</sup> The Heritage Project dismissed a variety of external developments on the north and south sides of the church, opting for the west end. Likewise, certain internal developments were dismissed as being too intrusive on the worship space.

Mid 2022	<ul> <li>The visiting and discussion around Transforming Trinity achieved three things.</li> <li>An outlet to resolve attitudes and feelings concerning the Heritage Project.</li> <li>The priorities for developing Holy Trinity towards being a Community Hub.</li> <li>The likely level of financial support. This has been set at £1.1million<sup>3</sup></li> <li>The obvious outcome of this was that the majority of Transforming Trinity would be an internal re-ordering, with a small external build as the outreach 'neutral' space.</li> </ul>
07/2022	TMRO 2022-071946 given for major seating and space experiment establishing the worship space required, overflow space for large events space that could be reallocated.
10/2022	PCC evening to dive deep into specific requirements in the light of the funding target. A revised "transforming trinity" brief was sent to the architect.
11/2022	Plans 1650L2003-07 drawn up. Special PCC meeting to develop a preferred option.
11/2022	Plans 1650L2008-09 created. These form part of the initial statement of needs.
01/2023	Statements of significance and need written, submitted to DAC case officer prior to site visit.
13/02/23	DAC site visit. The case officer's decision was to submit the draft statements of significance and need to the full DAC March meeting for their comment and input.
03/2023	Feedback received from DAC case officer.
04/2023	Designs modified and new plans drawn up 1650L010-11 reflecting the feedback.

In collaboration with the DAC and talking their advice (as at 2/5/23). See plans L1650L2010/11revA

## **Ground floor**

- Office (south aisle). Crèche (north aisle). Nothing further forward intruding on the worship space.
- Flexible sliding glass partition separating the usual worship space and social space.
- Lift and stairs in northwest corner and an AWC and WC incorporated into the same space.
- Servery, suitably clad in oak under the west window with cafe/social space around.
- New external area at the West End providing outreach and access into community. (A small extension under the west window, constructed in similar materials to the church plus a doorway for access).
- Relocating the font into the south aisle adjacent to the crucifixion window.
- A new Dias
- A storage cupboard at the rear of the North Transept
- A new floor and underfloor heating with additional heating solutions as part of the same system.
- Improved lighting and new seating. Soundproofing and insulation in the chapel.

## **First Floor**

- A small hall in the centre. A meeting room over the crèche. A storage room over the office. An AWC.
- The rooms will be open to the roof; thus nothing will cut across the west window.
- Provision will be made to leave all of the sculpture of Prince Victor visible.

## In Addition

- Solar panels (if permissible) with battery storage.
- Outside lighting. Improved and reconditioned driveway and pathways.
- Essential repairs and maintenance identified in the 2019 QI.

<sup>&</sup>lt;sup>3</sup> We regard this as an achievable figure kick started by the sale of a small property the church owned (£395,000) existing gifts given (£83,000), access to two small trust funds, pledges and the potential from grants and the lottery.

# Part Nine : Design Development and Discarded Options

## The Evolution of Transforming Trinity

**February 25<sup>th</sup> 2013** (R2A-12-133) Acanthus Clews (Discounted) Feasibility studies. Architect Camilla Finlay. These options were not costed.

**Option one.** Mostly internal re-ordering except for an external kitchen north of the vestry and a link corridor around the tower. Café in the south transept and aisle. Toilets in the organ storage area.



**Restrictions.** A significant compromise to the internal ordering of the church, specifically the location of the café and the north aisle mezzanine being alongside the worship space. The staff office is remote from the entrance. The spiral staircase is completely inadequate as access to an upper floor.

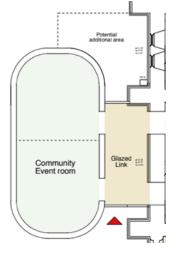
Option two. North side extension and some internal re-ordering. All ground floor.



Apart from the staff office in the south transept, the majority of the church was unaffected. The long linear extension on the north side provided a meeting room/ café and a new north porch with toilets. The kitchen as in option one.

**Restrictions.** Impact on the light and windows on the north side, lack of public visibility. The north is the dark side of the church, significant alteration to graves (many visited) and trees required. Ultimately it didn't provide the required space.

**Option three.** Option two plus a west end extension.



All of option two plus the addition of a community room outside the west end. Also toilets in the current organ store space alongside the staff office in the south transept (as in option one).

**Restrictions.** All of the restrictions that applied to option two and the belief that there was still insufficient space.

Concern was also expressed about the location and the visibility of the café (still in the north side extension). And the impact on the building of extensions to two sides. **Option four.** Building to the south and an extension on the west end. Minimal intervention in church.



Apart from a toilet and a store in the organ space, the church remains unchanged. The west end extension avoids graves, but the south side building is completely within the graveyard.

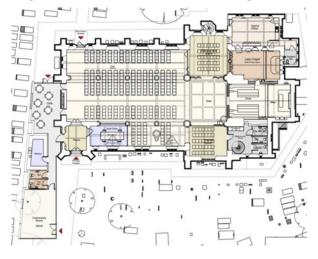
It was an attractive proposition to be able to run events independently from the church, but this solution leaves the church mostly unused except for worship purposes.

This proposal was phased. West end was phase 1, church re-ordering was phase 2, the south side stand alone building phase 3.

**Restrictions.** Although not costed it was deemed a significantly higher cost than other plans. It also had a major impact on the graveyard.

**May 22<sup>nd</sup> 2013 (R2A-12-133)** Acanthus Clews (Discounted) Feasibility study 2 Architect Camilla Finlay. This option was initially not costed.

**Option five.** Internal re-ordering and a west end extension



In this plan it was proposed moving the church organ onto a mezzanine in the north aisle, releasing the organ space for toilets (ground floor) and office space on a small mezzanine floor above.

An office is shown in the south aisle near the porch.

This plan found favour and was developed into the Heritage Project which was costed.



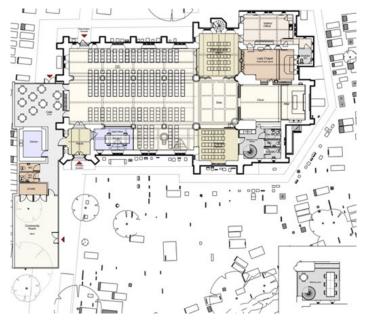
#### **The Heritage Project**

The budget for a developed option 5 was **£2million.** A DAC site visit explored this preferred option in April 2014.

The Heritage Project was presented to the church in July 2014 (NB the extension has developed from option five and did cover a number of graves.)

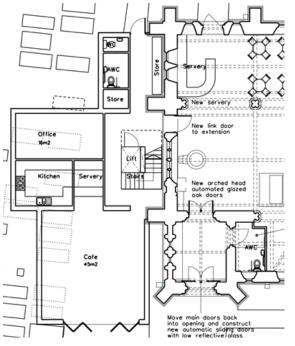
Funding was not forthcoming and the architects were advised of the project halting at the end of 2014. The architects did suggest getting planning permission for the extension which was given in August 2015 but no further work was done.

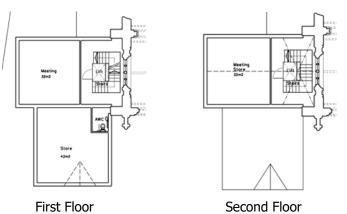
An interregnum began Sep/2016 - July/2017.



**Transforming Trinity** was introduced in February 2019 (see Project Timeline, page 23). A design for a new west end was offered as a feasibility study and to give traction to conversation about a community hub development and priorities.

West end extension – drawing 1650L2002 (see picture in Project Timeline, page 23)

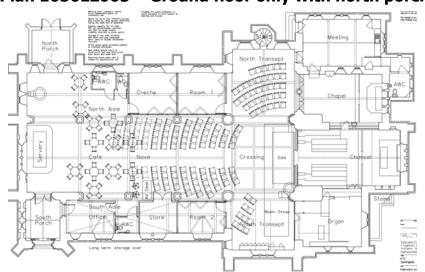




Enclosing the whole west end, this design covered a number of graves and enclosed the whole west window. It did however create a great deal more space than the previous project. With re-ordering in the church similar to the Heritage Project this plan was costed at **£2,018,246** and is not being pursued due to the cost.

Ground Floor (drawing 1650L2002)

November 2022 – Mark Goodwill-Hodgson drawings to a revised brief and lower budget.

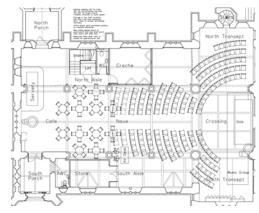


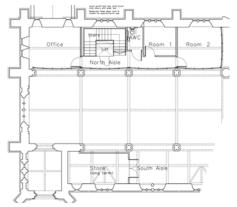
#### Plan 1650L2005 – Ground floor only with north porch.

NB – all Mark's plans respect the wish to leave the vestry, chapel, chancel and organ space as they are. (In the drawing the vestry is described as "Meeting.")

**Restrictions.** The church became too overloaded and crowded with both aisles filled with rooms. It was felt that the rooms would not enhance the worship experience or authenticity of the church. The office in the south aisle is too small. The font was rather lost in relationship to the worship space.

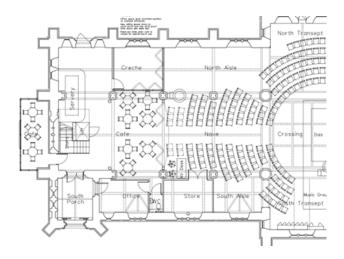
#### Plans 1650L2003 &04 – incorporating a north aisle mezzanine.

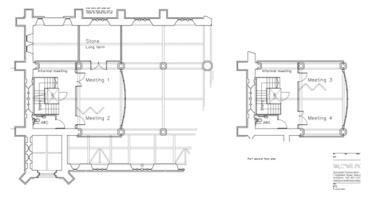




**Restrictions.** Among other things the office on the first floor remote from the entrance, rather small rooms on the 1<sup>st</sup> floor, access to the store above the south aisle store. No external visibility or neutral external café space.

#### Plans 1650L2006 & 07 – A mezzanine across the west end and small external extension.



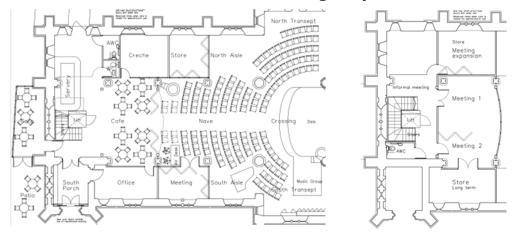


This option included a second floor and replicated the idea of a west end extension but inside not outside the church.

**Restrictions** a small office and only one additional WC on the ground floor. The whole west window would be obscured somewhat by lift and stairs (if the 2<sup>nd</sup> floor was agreed). A slightly awkward relationship between servery, interior and exterior café space.

The PCC met to discuss plans 03-07 and asked the architect to draw up their ideas shown in the following plans which were incorporated for the DAC site visit and at a full DAC for their comment.

#### November 2022 – Mark Goodwill-Hodgson plans 1650L2008 & 09



These plans met all the requirements the PCC had placed in the brief. All the above had maintained the Chancel by Street, the position of the organ and the integrity of the Chapel. The vestry would become a most useful meeting room with little adaption.

The church would still be able to conduct larger services with attendances at 300 by incorporating the social space at the rear of the nave.

It was envisaged that the store (north aisle) and meeting room (south aisle) would re-use the existing screens from the two transepts, allowing the worship space to be increased for larger events. The existing sound and vision system would need to be moved to accommodate worshippers being further forward but without any further purchase of equipment.

**Restrictions.** The DAC feedback commented on the meeting and store room (centre bay, both aisles) as encroaching upon the worship space, the positioning of the lift and stairs, obscuring some of the west window and the unusual exterior extension.

It was felt the Font needed greater space and prominence and care should be taken in the relationship between the platform and the pulpit. It was felt that the room divisions and ceiling over the upper rooms would impact significantly on the west window and relevant questions were raised about the need for all the rooms and spaces requested.

These issues have been addressed in plans 1650L2010revA and 11revA.

# Part Ten : Current and Proposed Activity

#### Overview of current and proposed activity with spatial usage

Activity / Group	Attendance	Frequency	Space	Storage <sup>1</sup>	Facilities required	Facility restrictions
Existing activities that require more facilities.	at require mor	e facilities.				
(Church office/ Clergy vestry)	Up to 6	6* week	Vestry	Admin & office supplies	Desks / cupboards / copier / safe / office equipment / WC / Kitchen	Heating / Access - Wrong location at the back of the church.
BCP 8:00am	Up to 12	1* month	Chancel	Nil	WC	Heating / Access
Small midweek worship service	Up to 12	1* week	Chancel	Nil	WC	This service should be in the Chapel <sup>2</sup> – see "Crèche"
Large service (Traditional format)	Up to 120	1* week	Main worship space	Musical instruments and equipment	Whole building / AV / WC / Kitchen Crèche / Prayer Space / Social space	Heating, lighting, seating. Insufficient WCs, & breakout rooms. Limited social space and no private prayer space during the service.
Crèche	1-5	1* week	Chapel	For toys and play equipment	WC / carpeted floor / children's chairs and tables.	Insulation, heating, seating, soundproofing.
Festival events Church & School	Up to 300	11 annually	Main worship space	Musical instruments and equipment	Whole building. AV. WC. Kitchen. Crèche. Prayer Space.	Heating / Seating layout / platform size
Wedding/funeral/ baptism	20 to 300	Approx. 20	Main Worship space	negligible	WC / AV / Crèche	Heating, lighting, lack of WCs. No social space for afterwards.
Weekly café <sup>3</sup> ( <i>generates income)</i>	Up to 30	1* week	North Transept	Catering equipment	Kitchen / WC / tables and chairs	Kitchen facilities are inadequate. Wrong location and lack of space limits attendance.
Cell groups	Up to 12	2* week	North Transept	minimal	WC / AV / Kitchen	Location is inappropriate (but is the only warm space)
Foodbank	Ad/hoc	weekly	South aisle	Considerable	Storage for plastic containers and a large quantity of food and consumables	Bespoke (mobile) cupboards to house the supplies are required.
Church Year <sup>4</sup>	5 to 50	14 annually	North Transept	Catering equipment	AV / WC / tables & chairs / Kitchen	Heating, lighting, seating layout, suitable gathering space.
Music practice	Up to 10	1*month <sup>5</sup>	Main worship space	Musical instruments, stands, music	AV / WC / Kitchen	Heating, lighting.
Church Meetings <sup>®</sup>	Up to 15	16 annually	North Transept	Minimal	WC / AV / Kitchen	Heating, lighting, seating layout, suitable space.
<sup>1</sup> The church will require st	orage for cleaning	t additionant and t	the flower team	An additional 180 ch	<sup>1</sup> The church will require storage for cleaning equipment and the flower team. An additional 180 chairs for large events and café tables storage for Christmas tree and	storad for Christmas tree and

<sup>1</sup>The church will require storage for cleaning equipment and the flower team. An additional 180 chairs for large events and café tables, storage for Christmas tree and decorations, event shelters, marquee. Also clergy robes and altar frontals and communion 'furniture' and linen.

<sup>2</sup>Our room restriction means the chapel is currently laid out for a crèche.

<sup>3</sup> In winter the café has been in the enclosed north transept our 'warm space'. In summer it relocates to the back of church and outside but is then far removed from the kitchen in the vestry.

<sup>4</sup> Maundy Thursday Supper / Lent Course / Deanery meetings / Clergy meetings.

<sup>5</sup> Pre-Covid this was weekly. <sup>6</sup> Includes PCC and Pastoral Team meetings.

Activity / Group	Attendance	Frequency	Space	Storage <sup>1</sup>	Facilities required	Facility restrictions
Current activities that are difficult to host in church	it are difficult	to host in chui	rch			
Concerts & Opera (generates income)	Up to 250	6 annually	Main worship space	Minimal	Whole building / AV / WCs / Kitchen	Heating, lighting, lack of useful space due to fixed furniture, tables, changing room, 'backstage', insufficient WCs
Social (scouts quiz) (generates income)	Up to 250	2 annually	Main worship space	Tables	Whole building / AV / WC / Kitchen.	Heating, lighting, lack of useful space due to fixed furniture. Tables more chairs, insufficient WCs
School visits <sup>7</sup>	30-60	7 annually	Chancel	None	WC / Seating	Poor heating and lighting and room facilities
Activities we have lo	st since losing	the CMI build	ing and extre	mely difficult due	Activities we have lost since losing the CMI building and extremely difficult due to the restrictions of the existing facilities	isting facilities
Intergenerational Worship <sup>8</sup>	Up to 80	1 * week	Main worship Space	Tables. Resources	Whole building / AV / WC / Kitchen Crèche / Prayer Space / Social space	No flexibility for café style layout. Insufficient rooms for breakout groups
Boogie ballet / Hartbeep music / (generates income)	10-12 with babies	Weekly term time	North transept	Minimal	WC & baby change	Not possible while the N. Transept is laid out for other purposes.
Youth Groups	5-30	Term time	Whole Church	Various resources	AV / WC / Kitchen	Ideally the church will create a variety of open spaces depending on the need. A
4Women charity dinners	80-100	3 annually	CMI – small hall	Minimal	AV / WC / Kitchen	small upper hall on the first floor, or the open ground floor that can be re-arranged
Men's breakfast	25-40	3 annually	CMI – small hall	Minimal	AV / WC / Kitchen	to suit any occasion.
Exercise classes (generates income)	10-12	Weekly term time	CMI – small hall	Mats	WC / space!	
Art/Craft classes (generates income)	10-12	Weekly term time	CMI – small hall	Art and crafts	WC / space!	
Messy church events	50-75	3 annually	CMI – small hall	Children's resources	Open flexible space	
Lunch n meet	15-20	monthly	CMI – small hall	Activity resources	Café style environment	
Social gathering after occasional office	unknown	uwouyun			Will require WC / tables, chairs and social space within the building	NB. Most likely small local funerals
Community Café ( <i>generates income</i> )	Up to 50	1-5 per week <sup>9</sup>	Social space inside and outside	Tables and chairs catering equipment	WCs / Crèche /	We aspire to the outside and inside spaces being linked
Short courses <sup>to</sup> (averaging 6 evenings)	Up to 30	Approx.24 evenings	Whole church	Minimal	Tables and chairs, AV / WC/ Kitchen	Heating, Lighting, suitable environment
Exhibitions	Unknown	Occasional	Occasional	Display screens	WC / Kitchen	Heating, lighting, access
<sup>7</sup> Wo arraitor to the test to the test of			m hoth for child		bilderon's week on sites as the School Council / Council and another / DTA montion	anntinee / DTA montinee

<sup>9</sup> The intention is to grow and develop the café to the levels of activity experienced before in the CMI when it was open throughout the week and making a profit. <sup>7</sup> We aspire to having a space that could be used as a classroom, both for children's work on site as well as School Council / Governor meetings / PTA meetings. <sup>8</sup> Three series of IG in 2022 was quite successful but required a TMRO to facilitate space. To develop further we need to create a more flexible worship space. <sup>10</sup> Alpha / Bereavement / Marriage / Confirmation.

# Part Eleven : Heating and a Sustainable Future

The current heating system was installed in 2016 and has sadly proved to be both expensive and inadequate. A combination of storage heaters and panels heaters has never achieved its purpose at a sustainable cost. As is noted elsewhere, throughout the colder months the church is frequently below 13 degrees.

The PCC commissioned a heating report from Emma Varney, B.S. Design Services Ltd. and the full report is attached as Appendix Five. Emma based all her calculations on plans 1650L2010 and 1650L2011; the same plans used at the DAC site visit and DAC meeting in February.

The report confirms what we know only to well. To heat the whole building would require approx. 160kW. The current heating capacity is 45.6kW.

Emma wrote her report with the cost of running the system in mind therefore her initial recommendation is a hybrid system utilising a gas boiler as part of the solution – albeit a hydrogen ready gas boiler. (See page 5 of the report).

# The PCC is committed to being carbon-neutral, using green energy and has rejected that aspect of the solution.

We have been able to confirm from Emma (and others heating suppliers we have consulted) that we can run the whole complex on Air Source Heat Pumps (ASHP) only.

Although the final design of the building is yet to be approved, the PCC's working assumption is an ASHP source distributing heat underfloor for the majority of the church, supplemented by additional output from trench heaters, fan convectors and wall mounted radiators. These latter methods will be chosen depending on which space needs additional heat and how the space is to be used.

#### Under-floor. Finally.

Under-floor heating was recommended in 2002<sup>1</sup> and again in 2014<sup>2</sup>. On the first occasion the works undertaken did not include heating and on the second occasion the project didn't continue.

Installation of under-floor heating will be disruptive but the time has come to grapple with the failing sub-floor and trip hazards, the layout and use of the building and planning for a sustainable warm future.

#### Solar power.

We have noted the Diocesan desire to take a lead on green energy and sustainability and being an eco-church. For our part we have rejected the notion of a gas-boiler hybrid system and are committed to green energy. With the whole of our heating and lighting remaining electric, we are exploring the potential to generate and store power through the installation of Solar PV.

The recent hike in utility bills has brought into sharp focus our capacity to pay for energy and heat the building. Every kW we can generate, use and store will aid us in running the church building affordably.

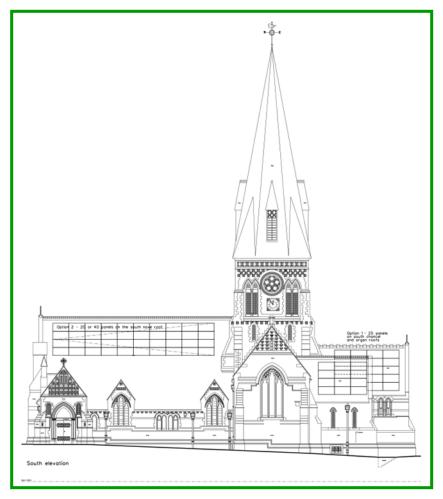
At the time of writing we have a pre-application advice request with RBWM. The church is a listed building and is in a conservation area so it's important to find out sooner than later what the likely response will be from the local authority concerning the installation of PV<sup>3</sup>. We are aware that the DAC may take a different view, however finding out the response from RBWM is a first step.

<sup>&</sup>lt;sup>1</sup>Chris Reading Associates of Winchester. A report written as part of the "Embracing the Future" programme of works. It was thought too costly and disruptive to be part of that programme of works.

<sup>&</sup>lt;sup>2</sup>Environmental Engineering Partnership. A report as part of the Heritage Project recommended underfloor for both church and extension. It's interesting that the heat source for church was recommended as a gas boiler or biomass boiler and ASHP for the new extension run from solar PV.

<sup>&</sup>lt;sup>3</sup>The report from RBWM may be too late for this booklet, but we shall communicate the outcome to the DAC before the September meeting if we have a reply by then.

Bearing in mind the high cost of getting pre-application advice and opinion, we opted to ask about all the obvious south facing roofs.



1. Panels on the south side of the former vestry that now houses the organ and on the chancel roof.

2. Panels on the south side of the nave roof.

(Although it is lower and wouldn't be as effective, there is also the top of the south facing roof over the north aisle.

This is behind the nave roof and the panels could not be seen from below, however there would be shading on these panels from the nave roof at times of the year when the sun is lower in the sky.

This latter possibility may be explored depending on the response to options 1 and 2.)

#### Impact of Solar.

Emma Varney's heat-loss calculations assume a day when the temperature is -3 degrees outside and it's desirable to have the church temperature at + 20 degrees. On such a cold day the kW requirement for a Sunday morning is 102kW. (*All relevant spaces heated*) 25 solar panels (option 1) working at 80% efficiency contributes 18.75kW, nearly 20% of the requirement. The more panels we are able to install (and the battery storage to go with them) the more sustainable and cost effective it becomes to heat and use the building.

Revd. Jon and Revd. Terry took part in a C of E hosted (virtual) event examining the possibility of solar panels and noted that other listed churches in conservation areas have been granted permission to install. We believe the internal structures of the church are strong and stable, the roof is in good condition and it would be a considerable, visible declaration by the church of our concern for creation to be generating power and remain carbon-neutral.

# **Part Twelve : Church Lighting**

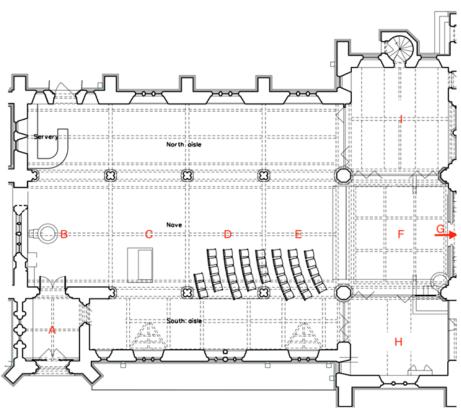
A question was raised by the DAC concerning the light levels in church and the impact of any new internal structures.

- The table below shows the light levels (in lux).
- Taken on 8<sup>th</sup> June 23, bright, strong sunshine all day with a clear sky.
- The first column shows the readings with all available lights switched on.
- Thereafter the readings are the natural light levels.

Location	9.25am	9.25am	Midday	2pm	4pm	7pm
A. South Porch (in shade)	-	1948	2216	2660	2700	870
B. near the Font	168	8	11	15	38	31
C. 2 <sup>nd</sup> Arch	240	7	6	17	35	75
D. 3 <sup>rd</sup> Arch	151	7	7	9	15	188
E. 4 <sup>th</sup> Arch	181	9	7	11	10	72
F. Centre of the Crossing	127	28	12	26	7	33
G. Centre of the Chancel	352	230	34	17	10	13
H. Centre South Transept	92	36	200	240	83	16
I. Centre North Transept	93	9	8	10	8	18

These readings demonstrate that the natural light level in church is very low indeed. Whenever the church is open we are obliged to have the lights on. The highlighted numbers are all below 50 lux, the recommended level for safely moving around a building. There are spaces that have a good level of natural light at certain times but the rest of the church requires lighting. We cannot rely on natural lighting; we always have to illuminate the spaces.

The highest natural light levels across church are in the evening at 7pm when the church is lit by the west windows. Locations B and C will be under a mezzanine and have little natural light, but the upper room will be an extraordinary place to be at such a time and the front part of the nave will continue to bene



of the nave will continue to benefit from the west window light.

The concern that internal structures will reduce the light from the windows is relevant, but as these figures show the light levels are far too low to protect. Our lighting design will seek to overcome the low levels of natural light by having at least three "scenes" we can create. One will show off the building's architecture. A second will allow for a bright level of light for services *(at hymnbook level)*. The third will be a more atmospheric lighting scene for events such as the midnight communion on Christmas Eve. It's envisaged that the first lighting scene will compensate for low natural light levels allowing the building to be accessed and used safely.

The Chartered Institute for Building Services Engineers produced a guide on lighting and the following is the relevant table for churches. The readings for Holy Trinity are with all available lighting switched on.

	Recommended	Holy Trinity	
Body of the church (Nave etc)	100-200 lux	168 – 240 – 151 – 181 lux	
Pulpit	300 lux	265 lux	×
Lectern	300 lux	332 lux	✓
Platform <sup>1</sup>	200 lux	160 lux	×
Font	300 lux	144 lux	×
Vestries	150 lux	388 lux	✓
Organ (music reading required)	300 lux	470 lux	✓
South transept – musicians' area	300 lux	94 to 112 lux	×
Altar	300 lux	1036 lux	✓
Sanctuary	200 lux	1036 lux	✓
Choir stalls	200 lux	635 lux	✓
Centre of Chancel	200 lux	352 lux	✓

As these figures show the lighting levels across church are patchy, particularly in the nave.

Our approach to re-lighting Holy Trinity will be the same as the lighting in the chancel, highlighted above, which was renewed in 2018. Most of the light units in that space had failed and we replaced with modern LED units which are not unattractive despite being functional items.

The lighting consultant took great care to have the Sanctuary and Altar as the most brightly lit aspect of church. The choir stalls either side are brightly lit but less so than the Altar. The centre of the chancel is the lowest, but still much brighter than the recommended level.

The impact of the whole re-lighting scheme is to draw attention to the Altar and succeeds perfectly. The roof space is also lit adding to the attraction of that space. In addition, we have experimented with temporary LED spotlights to add festival colour to the space.





We envisage that a creative lighting scheme combined with a lighter floor and furniture will lift the ambient light level to between 50 and 100 lux making the building safe to visit and move around. Services will have a light level near or above 300 lux and significant places (font, pulpit) nearer 600 lux as we do in the choir stalls.

<sup>1</sup> This reading includes the temporary LED spotlights from the high beams over the nave.

# Part Thirteen : Church and Community. Facts and Figures.

#### Worship at Holy Trinity

Pre-Covid the Sunday pattern was three morning services with the following average attendance.

8:00am BCP communion 10 adults 9:00am CW communion 37 adults 10:30am Café Church 45 adults and 12 children Totalling 104

Post-Covid a BCP on the first Sunday and a 10:00am weekly Holy Communion with the following averages

8:00am BCP communion 8 adults 10:00am CW communion 64 adults and 6 children This latter service is live streamed with weekly views averaging 35 views Totalling 113

*NB In 2023 we introduced a new Family Communion on the first Sunday of the month and are pleased to report that attendance was 69 adults and 17 children* 

We have a midweek, midday BCP communion with an average of 6 (winter) and 10 (summer) attending.

The church is open when our part-time administrator is in the office. Monday, Wednesday and Thursday 9:00am – 3:00pm.

The weekly café is held on Wednesday morning with an average attendance of between 15 and 20 in the winter and 25 to 35 in the summer.

Our Festival services are well attended throughout the year, for example Christmas 2022Evening Carol Service74 (+ 38 online). (inc. 7 children)2 x Christmas Eve Christingles439 (284 adults and 155 children)Midnight Service64 (+ 30 online)Christmas Day53 (+ 67 online) (inc. 10 children)

We take monthly communion services at Dormy House Nursing Home, (between 5 and 15 attending) Lynwood Care Home (between 5 and 20 attending) and Lynwood apartments (between 10 and 20 attending).

#### **Occasional Offices**

In 2022 we took 12 baptisms, and 5 weddings. We conducted 13 funerals and internments and 2 memorials. (Some funerals at the crem.)

The electoral roll in 2022 was 143 and our wider distribution network totals 196.

#### **Hosting Worship for Others**

Most frequently we host worship for Holy Trinity Primary School. Usually it is half the school at a time so that we can include parents, thus two Easter services and two Harvest services with an attendance of approximately 225 at each. The key stage two Carol Service plus parents is standing room only – 350-375 and the leavers service approximately 300.

We also host Christmas services for Charters Secondary School and the Dreamcatchers Nursery nativity, attendance is below 120 for both these events.

## **Community Use of the Church**

Pre Covid we had a series of local groups using the enclosed north transept, creating a source of revenue.

- A pre-school ballet group
- Music with Mummy
- NCT classes.

We currently have no bookings to use church space.

Our most frequent collaboration is with the Scouts who use the church for a quiz night. Attendance is approximately 250 and every inch of available space is used for team tables. They hold at least two per year. They generously tithe the funds they raise giving Holy Trinity 10%.

#### **Finance. A Simple Summary**

	2018	2019	2020*	2021	2022**
Total Income	£155,258	£172,130	£159,454	£135,542	£157,351
Total Expenditure	£150,568	£169,620	£128,039	£135,418	£121,945
Result	+£4,690	+£2,510	+£31,415	+£124	+£35,406
Parish Share paid in full	£79,692	£77,295	£76,309	£76,791	£78,332

\* 2020 The church received £10,000 from the Carluccio Foundation to assist with food poverty and a legacy from a worshiper in Bagshot of £24,000 for the maintenance of the church building so the actual result is a loss of £2,585.

\*\* The accounts appear to show a very healthy surplus, but £30,000 are restricted gifts towards Transforming Trinity so the actual surplus is £5,406.

## **Restricted Monies**

Organ Fund £6,753 – money given specifically for the repair and maintenance of the Harrison organ.

Barrington Beare Trust £75,460 – Former choir master. Money given for the upkeep and beautification of the chancel and sanctuary.

The Denis Burke Trust approximately £50,000– a trust for the discretionary use of the church wardens with a priority to supplement the income of Holy Trinity clergy widows left unprovided for in times past (of whom one remains in receipt of annual payments). *NB the process of transfer to the current wardens is a tortuous process and they still don't have full access to the three share accounts, hence the approximate value.* 

# **Transforming Trinity**

The church owned a small two bedroomed property used previously by curates and at other times rented out. The decision was taken to sell the property which sold in late 2019 yielding  $\pounds$ 395k. Church members have also been giving money for TT, currently  $\pounds$ 83k for a current total of  $\pounds$ 478k

(Full accounts are available on the Charity Commissioners website) https://register-of-charities.charitycommission.gov.uk/charity-search/-/charity-details/5003076/ financial-history

# Sunningdale Community

The 2021 census data is not yet available, but with property development still in the early stages the 2011 statistics will give an accurate overview.

Sunningdale had 5347 residents, 96% of whom were in households. There were 2,380 household spaces. 90% of households had at least a single resident, 10% of property had no usual resident.

The age structure is of interest and confirms our desire to have a wide-ranging ministry across all ages. See table. 13.9% of the residents are 65 or older and live alone.

76.4% identify as white British and 11% as 'other white'. A further 5.4% are from EU countries all of which leans the community to being a predominantly white population.

The Church of England Primary School would reflect these figures. Of 212 children on the role, 202 have English as the first language and 189 are listed as white or white/other. *(The local census identifies 92% of households having English as the first language.)* 

On the school statistics 107 identify as Christian/Anglican/ Church of England and the local census lists 69% of residents as Christian.

Age structure		
		Persons
		unningdale (as of 2011)
	count	%
All usual residents	5,347	100.0
Age 0 to 4	257	4.8
Age 5 to 7	208	3.9
Age 8 to 9	152	2.8
Age 10 to 14	455	8.5
Age 15	68	1.3
Age 16 to 17	137	2.6
Age 18 to 19	69	1.3
Age 20 to 24	192	3.6
Age 25 to 29	191	3.6
Age 30 to 44	1,020	19.1
Age 45 to 59	1,169	21.9
Age 60 to 64	324	6.1
Age 65 to 74	519	9.7
Age 75 to 84	363	6.8
Age 85 to 89	129	2.4
Age 90 and over	94	1.8
Mean Age	42.3	-
Median Age	44	-

Sunningdale would appear to be a healthy place to live, 86.3% of people say they are in good or very good health,

only 50 people would claim very poor health, however 10% of the population is providing some level of unpaid care every week.

70.4% of property is owned either outright or with a mortgage, 18.9% of property privately rented. Only 7.5% is rented from the local authority. Only 9.8% of the population have no access to a car or a van, over 50% have access to 2 cars or more.

64.2% are in employment, 2.7% unemployed, 30.9% 'economically inactive' ie retired, student, home-maker etc. 26.3% of the residents are working more than 49 hours per week, a further 48.1% working between 31 and 48 hours per week.

## Deprivation

The ArcGIS Church of England parish map shows that we are in the top 10%, that is the 10% least deprived parishes. The Church Urban Fund places Holy Trinity Sunningdale as 12337 out of 12382 (where 1 is the most deprived parish and 12382 the least deprived parish).

In other words we are the 45<sup>th</sup> parish with the lowest deprivation. However, our well used Foodbank, the Hardship Fund and the pop-up Foodbank in the neighbouring Hope Centre tell a different story. Our strong connections at the primary school mean that the headteacher is able to ask for Foodbank parcels and supermarket gift cards for deprived families, some of whom are out of catchment, but nevertheless our responsibility.

## **Residential Developments Planned**

As mentioned elsewhere, the biggest development is on Sunningdale Park with 300 new homes being built and planning towards another 50 homes on Broomhall Farm.

# **Condition of the Church Building**

The church is generally well looked after and priority is given to any works needing immediate attention. For example a new leak was discovered on the flat roof of the cloakroom (Dec 2022). This has been sealed. Our electrical inspection identified a failing fuse board and this was immediately replaced.

The last QI was in December 2019 and inevitably our capacity to begin a programme of works was impeded by Covid. A short summary of the most urgent works required is attached as Appendix Three (page 44) showing the items we have been able to undertake.

Long term there are issues we seek to address through Transforming Trinity, in particular the serious state of the floor in the nave and aisles with many trip hazards. The age and condition of the lighting. The heating.

We are currently having all our exterior oak doors removed, restored and returned.

# **Energy Audit**

We were one of the first churches to take up the opportunity of an energy audit but found the advice offered to be of negligible value (February 2019). See Appendix Four : Executive Summary (page 45).

It seemed to tell us the obvious things we were already acutely aware of. We have changed the bulbs we are able to reach, we have added draft proofing strips on outer doors but the bigger problem of a building like ours was not really addressed.

Our feedback to the Diocese (and that of other churches) led to a change in the audit and a second one has been completed. Feedback was of more value.

## **Local Facilities**

#### The Village Hall, Church Road.

This is available for hire and offers two spaces, both of which have their own kitchens. The large Main Hall at the front of the building is used extensively during the week for a busy programme of classes - exercise, dance etc - and available for private hire for birthday parties, wedding receptions, charity events and theatrical productions at weekends and in the school holidays. There is also a Small Hall at the rear of the building which is the home to Sunningdale Pre-School during term-time and available for private hire during school holidays and half terms.

Our Churchwarden is on the team responsible for the hiring of the hall and it is virtually fully booked with regular enquires for use that have to be turned away.

#### The Hope Centre, High Street.

The former Baptist church is on the High Street opposite our north gate. They have a warm meeting room and kitchen and we have held monthly Lunch 'n' Meet gatherings there pre-Covid.

**The Primary School**, Station Road. The facilities lend themselves to children's activities and clubs. The school is used at weekends and for after-school clubs mainly. The church has held a Summer festival event on the grounds (pre-Covid)

**Parish Council Community Room**, Broomhall Recreation Ground. A meeting room with kitchen area for either 18 boardroom style or separated into 2 smaller spaces by a bi-fold door. Used as pop up library space, mobile diabetic eye clinic and for cadets.

# **Appendix One : Letters of Support and Encouragement**

We have been grateful to have the support and encouragement of Bishop Olivia who wrote to the church as we emerged from the pandemic and began the most recent phase of the project.

I am excited about the plans to transform Holy Trinity and would like to encourage you to get on board with this bold and imaginative work. I am currently reading Gilead by Marilynne Robinson and am struck by the ease with which the non-conformist congregations in the American Mid-West in the 19th and 20th centuries put up their buildings and pulled them down when they no longer suited or served the needs of the community and the purposes of the Gospel.

Transforming Trinity is not so radical! But this vision is also about work and worship; about serving the needs of the community and enabling the Good News to be heard in new and different ways.

Friends, the times we have been through have been extraordinarily demanding on all of us. The vision of Transforming Trinity asks that we not only survive them, but that we defy them, and emerge with a strong sense of what we need to thrive and grow as this decade unfolds before us.

You may know that my particular passion is the environment, so as well as the provision of community, social and meeting space, I am delighted with the plans to renew and to 'green' the heating system and energy use. What an opportunity we have here to put our thoughts, words and anxieties about the state of the planet's health into concrete action - a solid and enduring monument to which we can point and say this is how much we care.

This current iteration of a process which has been going on at this beautiful and iconic church since it was built in the mid-19th century is one which will take it far into the 21st century and beyond as we gift this building to our children and grandchildren. I commend this vision to you and ask that you engage with it with your hearts, minds, imaginations and pockets. It is a gesture of faith and defiance, undergirded by the Love that will not let us go.

Few people know the church as well as Hilary Crofton and the 1<sup>st</sup> Sunningdale Scouts who make use of every inch of space for their quiz nights. This activity ideally demonstrates our desire to share the building as a place for the whole of life, not just worship services.

Holy Trinity Church has been a well-loved landmark for Sunningdale for many years and has evolved to become the location of choice for the bi-annual Ouiz Nights for  $1^{st}$  Sunningdale Scouts over the last 3 years. On these evenings, hundreds of small candles, twinkly lights and coloured filters work well to create a warm and welcoming glow against the historic Victorian brickwork. Paired with an openness and genuine hospitality from the Holy Trinity family, these events are hugely popular with both local Scout supporters and regular Church goers alike. At the start, the number of Quiz Night attendees was severely limited by how many tables could be accommodated in the side aisles and although it was a successful fund-raising event, in reality, the chasm of empty pews in between created two separate mini events. Since then, Jon has experimented with reconfiguring the central space and we have been able to bring more tables closer together to create a larger, more cohesive and much more communal event. Whilst some might nostalgically cherish the rough-and-ready stained pews as part of the original fabric of the Church, their current inflexibility only reinforces a more out-dated role of the Church as a Sunday-only location for worship and pious reflection. The Transforming Trinity proposal is a truly brilliant concept, providing flexibility to accommodate the ever-changing needs of a 21<sup>st</sup> century ministry supporting the local community and making the Church not just the geographical centre of Sunningdale, but its beating heart too. At 1<sup>st</sup> Sunningdale Scouts we fully support these plans and look forward to having many more Quiz Nights and other events at Holy Trinity Church in the years to come.

Holy Trinity Primary School are our most frequent visitors (the school is 400m from church) and Revd Jon is a school Governor and frequently visits school for assemblies and to give pastoral support. Headteacher Jo Griffith has added her support to our plans.

Here at Holy Trinity School, we very much value our links with Holy Trinity Church. Our pupils, staff and parents benefit from these links in various ways at various points throughout the year.

One of the highlights every year are the services that all our pupils participate in and that our parents enjoy. As a community, we would benefit greatly from additional space to accommodate the very supportive turnouts for services. Providing enough seating for the whole school plus guests would be such a wonderful asset. Our pupils gain invaluable experience from taking part in services and the memories stay with them and their families.

Various year groups visit church as a part of the curriculum. Having a classroom space with tables and chairs to accommodate a class would make these visits even more impactful (and comfortable!). Our pupils gain insight when learning at church and many of them thrive in a change of environment.

We have various groups at school that meet at different times; Governors, School Council, Spiritual Leaders, PTA. It would be fantastic to have the option of these meetings taking place at church in a more comfortable and available space. We also have children with additional needs. Having the option of a sensory room/ quieter space at church, would provide them with a much-needed space or indeed for small groups of pupils to access this space would be beneficial.

In school the dining hall is the largest space. Were we able to utilise a larger space at church, we could lay on exhibitions of pupils' work, events to raise funds via PTA and other such activities. We are very much looking forward to the plans being completed!

In our small community it's unsurprising that the relationships and connections we have are at many levels. Church member Peter Grover is currently chair of the Parish Council. Responsibility for the church grounds was taken back from RBWM and as a Councillor it was part of Peter's brief to keep an eye on maintenance activity. Under the active supervision of the parish clerk the current high standard of the churchyard is down to the Parish Council. Peter is also a Governor at the primary school. He knows the plans for Transforming Trinity very well and recently emailed...

The plans you have for transforming Holy Trinity Church are amazing and long overdue. It will be great to have a community space where people can come, meet, worship and enjoy drinks and snacks. I am sure that, alongside the existing facilities in the village, there is a pent up demand for further space in our ever-growing community, whether it is meetings, or quiz nights. Let us know whatever we can do to help you and tie things into the wider community plans.

By no means least there is the enthusiasm of the congregation; demonstrated by the amount of money pledged and already given when as yet plans have not been finalised. One cannot help but contrast this with the muted response to the Heritage Project (see note on page 23).

NB. As noted elsewhere we are still waiting for a response from the Borough concerning solar panels. We will need their permission, along with the DAC, for any external building. We are encouraged that the extension for the Heritage Project was given permission and that the design by Mark Goodwill-Hodgson for the West End is much more "the language of the building" and creates a wonderful relationship with it. We anticipate the Borough's support.

opera píccolína

mail@jepromotions.co.uk www.operapiccolina.com

**Revd Jon Hutchinson** 

Holy Trinity Church Church Road Sunningdale Berkshire SL5 ONJ

28 July 2023

Dear Rev. Jon,

Proposed refurbishment - Holy Trinity Church

We are very excited to learn of your plans to refurbish Holy Trinity Church. As you recall, several years ago we had the opportunity to stage a production of Puccini's Tosca in the church. What started as a concert version of the work, turned into a fully staged performance with a 30-piece orchestra. The atmospheric surroundings of the church made for a special performance and a very memorable evening.

We would very much have liked to stage further performances at the church however, the lack of facilities for the audience and cast alike did not make for a sustainable practical performance venue. At that time there was just a single WC for use by both audience and cast, no changing rooms, and the hard pew seating. The proposed plans go a long way to solving these issues. In particular the addition of additional WC's both "front of house" and "backstage", the addition of the café seating creating a foyer style area and the provision of flexible comfortable seating would result in a well-appointed performance / concert platform whilst maintaining the atmospheric ambience of the existing church building.

We hope that the proposed refurbishment is manifest, and we would certainly seek to make Holy Trinity Church one of our regular performance venues.

We wish you the best of luck with your proposals and sincerely hope they come to fruition.

Yours sincerely

David Norman

Opera Piccolina – part of JE Promotions David Norman – Artistic Director (07789 938389) 7 Woodside Road, Winkfield, Windsor, Berkshire SL4 2DP Telephone: 01344 882445

# **Appendix Two : Seating**

## Commentary

### **Exceptional Events**

Only once in 26 years has there been an attendance way beyond our capacity – Revd. TWH took a memorial in 2016 and 513 attended. This is beyond our H&S capacity. The recommendation would be to relocate anything likely to be this number to St. Michael's Sunninghill.

The former crib service / toy service / now the Christingle was 550 in 1998. Two services are now held on Christmas eve (in 2022 the numbers were 279 and 160)

370 to 400 attendance.

1998 – the School carol service with the whole school and parents. It is now only KS2.

1999 – confirmation. The last one held was below 150.

1999 / 2000 The trend on Remembrance Sunday has been downwards over 20+ years.

Crib/toy/Christingle – see comment above.

300 to 350 attendance.

While not frequent there is the possibility these will occur from time to time and provision should be made. These events will be the exception not the norm, but adequate seating, access around church, building evacuation and facilities should ensure that these occasional events can be accommodated.

#### Seating Experiment – July 2022 onwards (TMRO 2022- 071946)

At the congregation's request seating was moved further forward in the building, the platform reduced and the transepts opened up. As well as exploring the areas we wish to use for permanent seating we are establishing those areas we do not need seats.

#### We have tested the proposition of a permanent worship area for a minimum of 120 and the capacity to extend to 300.

NB – there are an additional 30 places in the choir and the possibility of the first-floor rooms being used as a gallery for exceptional events. (see plan 09)

During this temporary re-ordering we accommodated the two Christingles (279 and 160) without a hitch and managed a rather exceptional 376 for the primary School leavers service. *(Exceptional because we had two year 6s. We seated the whole school of 240, plus staff, plus parents for the 60 year six students. We had approximately 30 standing at the rear of church.)* 

During the seating experiment questionnaires were distributed each week and comments collated (see next page). These were fed into the PCC discussions about the church's needs.

Our reasoned conclusion is that a minimum 120 seats are required with expansion into the social space and aisles to 300. Any funeral or memorial likely to be in excess of 330 we would explore using St. Michael's Sunninghill.

# **Appendix Two : Seating**

# The seating experiment - collated feedback. July to December 2022

# **Obvious Conclusions.**

- 1. The best seats for view and sound are in the Nave between the pillars. You can hear and see everything particularly if communion is consecrated at the altar.
- 2. People prefer soft seats to pews!
- 3. A children's room is necessary (ideally soundproof) but not in the eye-line of worshippers who find the movement distracting. It would be good at the back.
- 4. The Lighting on the platform is very poor.
- 5. The sound system would need to be relocated for a different seating pattern.
- 6. The centre of the Nave (between the pillars) should be retained for worship.
- 7. Sitting too near a big screen in uncomfortable, but having another screen further away solves the problem.
- 8. Getting screens at the right height solves the problem of someone standing in the way of them.
- 9. People frequently have drawn attention to the 'muttering' from the prayer corner.

## **Emerging.**

- 1. People have really liked sitting in the North Transept and the South Transept is an ideal space and location for musicians and singers.
- 2. People love being further forward and nearer the altar.
- 3. People appreciate the space we have without the transept screens.
- 4. Moving the piano seems to have been good and it lends itself to the south transept being a space for musicians.
- 5. How the back of church looks as we enter matters to people. Some love seeing the café. Some hate seeing the café.
- 6. Can the speaker/leader be on screen?? (Yes)
- 7. The sense of the worshipping community has been improved.
- 8. A number of people prefer us to consecrate and conduct communion at the altar, others prefer the platform. However we intend to be flexible thus provision for both.

## What we want our architect to solve.

1. A space for prayer during the service that is visible (as a safeguarding issue) but private from a sound point of view.

# Additional learning.

- 1. In the current layout the middle south aisle is not a good place to sit.
- 2. Worshippers do use the north aisle but there are issues with visibility. It's often that these are padded seats near the heaters.

# **Appendix Two : Seating**

# Attendance Numbers 1997 onwards.

(HTSP = primary school. n/r = not recorded.)

	Mothering	Easter Day	Exceptional events	Remembrance	Carol Service	Christingle /	Midnight	Christmas
	Sunday -		selected for high numbers	Service		Toy service/	Comm	Day
						Crib service		
1997	200	n/r	n/r	n/r	n/r	n/r	146	130
1998	200	164	260 HTPS Harvest	350	275	550	150	157
			180 Church Harvest					
			400+ HTSP Carols					
1999	250	174	400 Confirmation	400 est	n/r	n/r	99	150
2000	n/r	153	250 Sunningdale School	400 est	n/r	n/r	140	213
2001	n lr	200.	200 Harvest	2E0.oct	p/r	100	130	130
2001	n/r	200+	250 est Harvest	350 est	n/r	180	136	130
2002	200 est	154	200 est Harvest	n/r	n/r	400 est	170 est	250 est
2003	n/r	169		n/r	n/r	275	131	115
2004	n/r	135	200 est Harvest	n/r	n/r	200+ est	145	120
2005	n/r	165		n/r	n/r	n/r	142	135
2006	n/r	199		200+ est	294	410 est	200 est	230 est
2007	n/r	181		n/r	n/r	380 est	150 est	240 est
2008	156	195	300+ est a welcome event	284	n/r	n/r	n/r	92
			190 est Harvest		-	-		
2009	105	310 est		n/r	200 est	n/r	n/r	199
2010	n/r	149		n/r	300+ est	132	108	131
2011	n/r	137		n/r	n/r	n/r	118	114
2012	n/r	115		n/r	n/r	2 * 200 est	148	150 est
2013	122	106		n/r	274	201 + 163	201	113
2014	60	155	121 harvest service	252	212	130 + 240	129	137
2015	n/r	162	300 est funeral	123	200 est	190 + 130 est	150 est	100 est
			290 est HTPS carol service					
2016	72	128	513 memorial service	127	119	276	98	144
2017	79	130	353 funeral (M Smith)	176	112	370	112	87
			314 funeral (A Tittle)					
			196 – induction JGH					
			325 HTPS carols					
2018	77	67 + 87	142 funeral Sir J. Crofton	231	110	212 + 207	82	104
			190 funeral G.Williams					
2019	split	71 + 92	270 funeral R H-Wight	159	169	190 + 185	94	114
			160 ordination TWH					
	1		272 Charters Carols					

# **Appendix Three : 2019 QI Observations and Comments**

Items in the report flagged:

A are urgent and are to be attended to urgently ie within 3 months (if no action is taken serious consequences and/or exacerbation of secondary defects will occur), *B* are preferred and are to be undertaken within one year (potential for further deterioration, but not imminent) *C* are necessary - items to be undertaken within 18 – 24 months years (mainly visual defects with limited repercussions at present) D are selected as requiring attention within the Quinquennial period E are desirable with no particular timescale M are routine maintenance.

Our A items are: MGH estimated £2.5K

**Roof 5.1:** repair broken roof tiles p6, attend to missing/slipped tiles p7 *completed* Windows 5.5: attend to glass repairs p28, attend to broken pane p31 and p35 Tower 6.1: secure broken panes Mortuary 7.4: attend to roof repairs p72, clear gutters and downpipe p72

Maintenance items are: MGH estimated £5K

**Roof 5.1:** securing slates p6 and p10, clear valleys of debris p8, p9, p10 and p11, monitor cracking and seal as necessary (asphalt roof) p11, clear roof of debris to improve drainage p11, completed

Rainwater Goods 5.2: clear gutters of debris p13 and 15, clear hopper of debris p16 *completed* Drainage 5.7: clear debris p39, p40 and p41 *completed* 

Clock 6.2: General maintenance p44 (NB requires a repair. Part of TT?)

**Churchyard 7.2:** clear paths p69 and p70, thin overgrowth p70 *completed* 

Monuments 7.3: monitor loose headstones p71 and p72 *completed* 

**Electrical 8.2:** set up maintenance contract security system p75 *completed* 

#### <u>B items are: MGH estimated £7K</u>

Roof 5.1: secure lead flashing p6 and p8, secure loose tiles p8, secure/replace tiles p9 and p10, replace tiles p10 and p11, secure slate p11, completed

Rainwater Goods 5.2: repair rainwater goods p13, clear gutters of debris and repair gutter ioints p15, replace gutter and repair downpipe p15, repair and clear gutter p16,

Walls 5.4: remove ivy p22, remove vegetation p25 on-going

Windows 5.5: decorate saddle bars and hopper p28, p30, p31, p32, p33, p34, p35 and p36 remove ivy growth p28, lead repairs (window) p33, repair and decorate frames p35 **Doors 5.6:** undertake repairs to retaining wall, railing and steps p37,

decorate doors p37 and p38 on-going

Drainage 5.7: unblock gullies p39 and p40 completed

**Tower 6.1:** secure spindle p42

Basement store 6.7: dispose of paint p65 *completed* 

Mortuary 7.4: decorate cast iron p73, remove ivy p73, decorate doors p73

Electrical 8.2: review test and implement requirements p74 *completed*, replace lamps p75

Fire Precautions 8.3: Undertake full fire risk assessment and implement findings p76, inspect fire extinguishers p76 annual inspections carried out

#### <u>C items are: MGH estimated £12.3K</u>

**Tower 5.1.3:** Secure shingles. Repair/replace louvres p7 All rainwater goods: 5.2 Decorate cast iron p12-17 Parapets and Upstands 5.3: Secure cap stone (organ) p17 Walls 5.4: Attend to corroded grille (organ) p22 **Windows 5.5:** undertake wholesale repair to window (organ) p28, Replace/remove protection (chapel) p34, Remove/replace polycarbonate protection (south porch) p37 *completed* **Tower 6.1**: Internally attend to gaps in shingles p44 Floors and Platforms 6.5: attend to floor repairs p53-54 Walls 6.1: Monitor cracks in chancel wall (internal) and nave and chancel arches p57-8, west wall above south window p58, above arch to north transept p59, mortuary p73 **Furniture and Fittings 6.7**: Lady chapel altar top repair p64 *on-going* WC 6.7.11: Fit emergency alarm p64 Boundaries 7.1: clean and decorate railings p69 on-going Mortuary 7.4: rainwater drains directly underground may need clearing p73 Fire Precautions 8.3: Review number, location and type of extinguishers in light of fire risk

assessment p76 completed

## 1. Executive Summary

An energy survey of Holy Trinity, Sunningdale was undertaken by Inspired Efficiency Ltd to provide advice to the church on how it can be more energy efficiency and provide a sustainable and comfortable environment to support its continued use.

Holy Trinity, Sunningdale is a Victorian Grade II listed church built in 1839 and significantly adapted in 1887. There are future reordering plans to remove pews and have underfloor heating to the nave. There is only electricity supplied to the site.

The church as a number of ways in which is can be more energy efficient. Our key recommendations have been summarised in the table below and are described in more detail later in this report. It is recommended that this table is used as the action plan for the church in implementing these recommendations over the coming years.

Short Term: Energy saving recommendation	Estimated Annual Energy Saving (kWh)	Estimated Annual Cost Saving (£)	Estimated capital cost (£)	Simple Payback (years)	Permission needed	To be actioned by who / when?
Change existing lighting for low energy lamps/fittings	10,396	£1,557	£3,562	2.29	List A/B	
Install PIR motion sensors to WC	13	£2	£40	19.95	List B	
Install SavaWatt devices on fridges and freezers	280	£42	£100	2.38	List A	
Fit draught proofing to external doors	1,040	£156	£1,500	9.63	List B	

Medium Term: Energy saving recommendation	Estimated Annual Energy Saving (kWh)	Estimated Annual Cost Saving (£)	Estimated capital cost (£)	Simple Payback (years)	Permission needed	To be actioned by who / when?
Improve air curtain above	Improve	-	£1,400	-	List B	
main entrance door	Comfort					
Insulate and board office	Improve	-	£8,000	-	Faculty	
roof	Comfort					

Long Term: Energy saving recommendation	Estimated Annual Energy Saving (kWh)	Estimated Annual Cost Saving (£)	Estimated capital cost (£)	Simple Payback (years)	Permission needed	To be actioned by who / when?
Install roof insulation with	5,200	£779	With roof	N/A	With roof	
any re-roofing works			works		works (List B)	

The Church should check any faculty requirements with the DAC Secretary at the diocese before commencing any works.

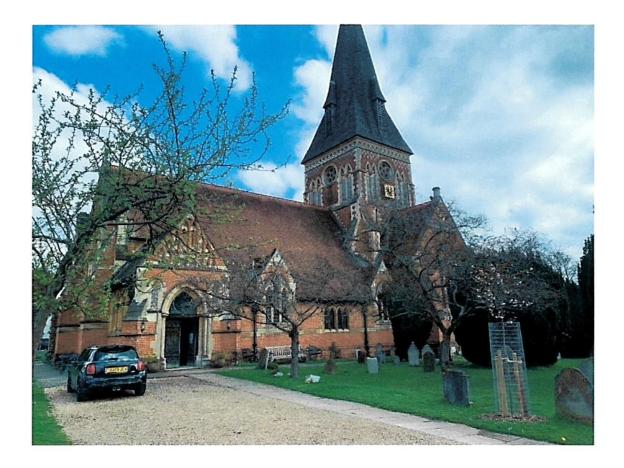


Inspired Efficiency Ltd - Energy - Carbon - Sustainability

**Appendix Five : Heating Report** 



# HEATING REPORT FOR HOLY TRINITY CHRUCH SUNNINGDALE



8<sup>TH</sup> May 2023



#### CONTENTS

- 01 Project Particulars.
- 02 Heat Loss Calculations.
- 03 Existing systems.
- 04 Systems Considered and Recommendations.



#### 01- PROJECT PARTICULARS

Holy Trinity Church can be found in the village of Sunningdale, in Ascot Berkshire the building sits on the corner of Church Road next to Holy Trinity School. The church is a Grade 2 listed church which is an early Victorian church built in 1839 the construction of the building is solid brick. The windows are single glazed stained-glass windows.

The purpose of the site visit was to assess the current heating system in the church with a view to a future heating upgrade and to carry out heat loss calculations which has been brought about due to the proposed re-ordering scheme.

#### 02 - HEAT LOSS CALCULATION

Post site visit heat loss calculations have been carried out on the church as attached. The following U Values were used for the construction which are the typical values used for stone built single glazed buildings. An air infiltration rate of 0.5 has been applied to the calculations which is as recommended for churches in the CIBSE guide A table 4.10.

The heat loss calculations have been carried out on the re-ordering scheme drawings provided which incorporates existing, new construction and surface upgrade areas.

Construction U Values used for existing building:

Solid Brick Walls 2.0 Wm<sup>2</sup>/K Stained Glass Windows 5.2 Wm<sup>2</sup>/K External Doors 5.0 Wm<sup>2</sup>/K Floor 1.5 Wm<sup>2</sup>/K Roof 2.1Wm<sup>2</sup>/K

Construction U Valves used for new areas: Glazing 2.2 Wm²/K Walls 0.35 Wm²/K Floor 0.25 Wm²/K Roof 0.25 Wm²/K External Door Wm²/K

The heat loss was carried out using information taken from the measured survey information take from drawings provided and site survey carried out on the 18<sup>th</sup> April 2023.

The heat loss calculation incorporates a 20% pre heat margin for the heat generator to enable the building to heat up quicker upon initial start-up.

From the heat loss calculations attached we can ascertain the heat generator output required to heat the church to an internal temperature of 20-21°C with an external winter temperature of -3°C.



The results of which are below:

Servery / Café	=	23.5kW
New Café conservatory	=	1.5 kW
Creche	=	2.23kW
North / South Aisle & Nave	=	40.6kW
Meeting room next to Chapel	=	9.5kW
Chapel	=	15.6kW
Chancel	=	21.3kW
AWC	=	2.2kW
Organ	=	12.8kW
Office next to South Porch	=	2.6kW
South Porth	=	8.3kW
First floor Meeting / Office	=	2.8kW
Small hall	=	9.6kW
First Floor Store	=	0.608kW
Lift / Stairs / WC area First floor	=	4.8kW
Total heat loss for the church		157.84kW

From the results of the heat loss calculation for the church, we can ascertain where the most heat input is required so that the heating system can be designed to suit. We can also see that the minimum sized heat generator required to heat the building to 20-21°C would be a minimum 160kW heat generator.

#### 0.3 – EXISTING HEATING SYSTEMS

The existing heating system which serves the church consists of a combination electric panel radiators, pew heaters and night storage heaters which are distributed throughout the church.

The control of the heaters is manual operation and they are turned on prior to occupancy of each area.

The existing heating consists of 18 x Frico Elegance panel heaters with an output of between 990w and 1200w each and 8 x Olsberg night storage heaters with an approximate output of between 2-3kW each. The existing heating installation covers approximately 22-30% of the building heat losses which would explain why the parish are struggling to get the air temperature above 8-10°C in the winter.

The church doesn't currently have a gas supply however, there is gas in the village and a main runs outside of the church in the road therefore it would be relatively easy to have a gas supply installed to the church should this be required as part of the solution to affordably heat the church.

The parish are wanting to open up the church to the local community and make the space more adaptable for the needs of the residents within the area therefore as part of the reordering the heating system will need to be addressed to ensure that the church is welcoming at all times of the year.



#### 0.4 – SYSTEMS CONSIDERED AND RECOMMENDATION

To enable affordability of the heating system for the parish and to enable them to go ahead with the planned reordering scheme which would include installing a new heating system that would heat the church sufficiently to a comfortable temperature, during the meeting we discussed the possibility of carrying out the works in phases if funds did not allow to have the full installation carried out in one phase.

Renewable technology plant and equipment is still more expensive to buy than traditional fossil fuels a hybrid system installed in phases would be prudent to be considered. This would enable the church to afford the heating installation needed to adequately heat the church whilst planning for the future and adhering to the 2030 zero carbon commitment required by the DAC.

The idea of a hybrid installation is that the air source heat pump pre-heats the heating water to 45-55°C which feeds into buffer vessel where the heating water is stored. The heating water is then drawn from the buffer vessel and mixed in a low loss header where the temperature of the water has been topped up by the gas-fired boilers to 70-80°C or as required to suit the heat emitters within the building. With this hybrid system the use of fossil fuels to heat the building is substantially reduced and therefore near zero carbon emissions can be achieved.

The proposed church reordering scheme lends itself perfectly towards installing underfloor heating as the primary heat source along with either trench heaters or wall mounted radiators or fan convectors to provide additional heat where required to meet the heat losses. Typically an underfloor heating systems will provide around 114 – 120 watts per meter square output therefore additional supplementary heating in the form of trench heaters or wall mounted radiators of the winter. In the areas where the underfloor heating isn't proposed wall mounted radiators or fan convectors as selected by the parish would be proposed as this would be a more cost effective and adaptable way of heating the spaces. We would suggest a simple BMS controls system to be installed which would allow zoning of the heating installation into zones to enable a flexible and more energy efficient way of heating the building.

A proposed phase plan for a hybrid system would be as follows:

- Phase 1 Installation of gas service to the building.
- Phase 2 Installation of heating installation underfloor heating, radiators, boiler plant and controls.
- Phase 3 Install air source heat pump to work in conjunction with the gas fired boiler.
- Phase 4 Install PV solar to enable church to generate their own electricity and predominantly come off the grid.

There are considerations which need to be taken in to account for a phased installation works plan in that the aim is to become carbon neutral before 2030 or as near to this as feasibly possible. With this in mind the initial phases of the works will need to be sized to enable the system to be future proof, this means that the emitters and pipework would need to be sized to lower flow and return temperatures to enable the system to run with a hybrid system for maximum efficiency and beyond that if gas boilers become phased out in the future the



system will need to be able to serve the church running soley with an air source heat pump installation without the need to adapt the system.

#### Phase 1 - Installation of Gas Service to the Building.

As the church currently does not have a gas installation phase 1 of the works would be to apply to the local gas board to have a gas pipe installed to the building.

The gas load for the church boilers would be 17.4m<sup>3</sup>/hr, therefore a quotation would need to be obtained from the gas shipper to install the service to the building.

A typical cost for this would be between £2800-£4400.00.

#### Phase 2 – Installation of Heating and Gas Fired Boiler Plant.

The phase 2 works would primarily be the installation of the whole heating system including consideration and planning for future phases 3 and 4 works.

The proposed location for the gas boiler plant would be within the former coal boiler plant area, this space is the ideal location for the boiler equipment as it is evident to see that at one time the church did have some form of wet heating installation as the redundant pipework is still within the area, in addition to this the incoming 3 phase power supply is located in the organ fan room adjacent and the external area to this space is also adaptable for future phase 3 works for the installation of the air source heat pump.



PROPOSED LOCATION FOR BOILER PLANT AND FUTURE ASHP



The hydrogen ready boilers would be installed as the phase 2 works and would be installed complete with low loss header arrangement with future connection points made available to enable the air source heat pump to be connected with ease during phase 3 works.

Hydrogen ready gas fired boiler are condensing gas fired boilers and are to all intents and purposes are identical in function an performance as traditional gas fired condensing boilers the only difference is they have an additional heat exchanger in them ready for when the national gas network introduces the 20% hydrogen / gas mix, therefore as far as renewable energy systems this is one that would future proof the installation rather than it being a current renewable technology.

The phase 2 works would also see the installation of all the internal heating distribution network, underfloor heating, radiators / fan convectors and also BMS zone control installation therefore phase 2 works would be the most expensive phase in terms of installation works and would enable the hybrid system to be 80% complete.

The heat emitters and pipework would be sized to enable the future phased works to be carried out without further disruption to the internal areas of the church.

Points to consider:

Hydrogen Ready Gas fired Boiler Pro's

- Cheaper boiler cost
- Long standing technology therefore reliability is known.
- Hydrogen conversion can be carried out at a later date if required or a future ready hydrogen ready boiler can be purchased in preparation.
- Suitable for use with traditional radiator system without factoring for lower operational temperatures.
- Compact in size and can be wall hung.
- Planning permission would not be required for these boilers.
- Future proofing.

Hydrogen Ready Gas Fired Boiler Con's

- Still uses fossil fuels to a certain extent even when the gas infrastructure is converted.
- Not zero Carbon nor is it renewable energy until the gas infrastructure is ready.
- Additional costs required to convert to hydrogen should a standard gas fired condensing boiler be installed without the conversion already on board.
- Flue system required.

#### Phase 3 – Installation of ASHP

The hybrid system would begin to take shape as part of phase 3 works and would involve installing an air source heat pump to be connected into the header in the plantroom. The proposed location for the air source heat pump would be externally located outside of the boiler plant area. The area would need to be adapted and a suitable base / plinth would need to be formed to enable the air source heat pump to be installed. This located for the air source heating pipework to be connected easily in to the heating mains within the boiler room. The air source heat pump could be screened off to maintain the external aesthetics of the church and prevent vandalism.



As phase 3 completes the hybrid system would consist of a gas-fired boiler coupled with an air source heat pump. All works on this phase would external and within the boiler room therefore no further disruption or adaptions would need take place within the church building.

As noted above air source heat pumps are mounted externally to the building therefore planning permission would need to be sought prior to the installation of an air source heat pump. In addition to this permission from English Heritage and the DAC must also be sought.

Air source heat pumps have a very high efficiency rating and are rated at between 300-400% efficient this means that for every 1kWh of energy used from the grid the air source heat pump will produce 4kWh of useful heat energy this is achieved by a reverse refrigerant cycle used within the ASHP. The air source heat pump uses a process called Vapour Compression Cycle where the unit reclaims heat energy from the air which is absorbed into a fluid within the unit which causes it to boil and become a gas, the gas is then compressed the compressor and evaporator chambers raising the temperature and thus producing the useful heat energy.

Hybrid system pro's

- LZC technology use.
- Suited perfectly to modern heating systems such as underfloor heating systems.
- Can be used with traditional radiator systems and trench heating systems provided that correction factors are applied to the emitter selection to ensure the correct sized emitter is installed.
- Back up available for if either the gas-fired boiler or ASHP breaks down.
- Air source heat pumps generally have a COP of between 3 4 which means that for every kilowatt of energy input the heat pump will produce 3-4kW output therefore enables them to be 300 – 400% efficient.
- Can be coupled to photovoltaic system, in the future, which would be connected to the electricity supply and therefore reduce running costs even further as the PV cells would be converting the natural light energy to electricity.
- Grants maybe available in the near future via DAC to help funding of LZC technologies.

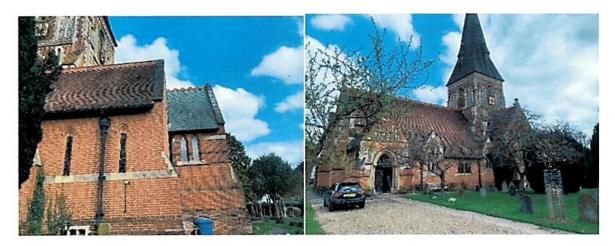
Hybrid system Con's

- Small amounts of Fossil Fuels are utilized.
- Higher installation cost.
- Flue would be required for the gas -fired boiler installed in phase 2.
- Newer technology therefore no real data beyond 10 years on the ASHP side.
- Planning permission required for the ASHP prior to installation.
- Three phase electricity supply required
- External compound required to locate the ASHP plant Would need to be located externally therefore suitable location would need to be found, approval from the DAC and possibly acoustic screening required. Typical size of a 60-70KW ASHP would be 2.3m long x 2.2m wide x 1.4m high therefore a suitable plinth would need to be formed to the external area would to house the ASHP.
- With the current high electricity costs, it can make them expensive to run without PV installations to offset the cost, however this will add to the installation cost.
- It is possible that two maintenance engineers maybe required to maintain the system as not all heating engineers that can service air source heat pumps have gas safe accreditation which is required for the maintenance and certification of gas-fired boilers.



#### Phase 4 – Installation of PV Solar

The final stage of the hybrid system, phase 4, would allow the installation of the PV solar and would involve installing PV solar panels. The below proposed location for the panels as discussed at the meeting would be on the roof above the organ area and chancel, this roof area is not fully visible due to trees being within the vicinity and therefore the panels would not spoil the primary aspect of the building.



#### PROPOSED LOCATION FOR PV SOLAR

#### PRIMARY ASPECT

The roof areas are south facing and have a combined area of approximately 45m.sq therefore would be suitable for approximately 20 panels which would have an output of 4800W and therefore should generate between 20-33kWh per day which would satisfy between 70-80% the heating demand of the church and therefore enable the church to run predominantly off grid especially when coupled to a battery storage arrangement.

The final phase of the hybrid system incorporating PV would consist of the same plant as noted in phases 1-3 above with the addition of photovoltaic panels complete with battery storage which would be required to be roof mounted. As with the ASHP planning permission and permission from English Heritage / DAC would need to be sought prior to any installations were carried out.

The engineering concept surrounding the installation is identical to the hybrid system without the PV solar installation however, the benefit from having the PV with battery storage is that the running costs of the heating installation would be offset against the electricity generated from the PV solar installation which is connected directly into the incoming supply therefore reducing the whole building running cost. The purpose of the battery storage is that surplus energy produced by the system is then stored into the battery cells for use at a later date, without the storage any surplus energy produced is fed back into the grid where your electricity supplier will credit your account however, this amount is generally around 8-15p kWh therefore the additional cost for the battery storage is beneficial in the long run.



Hybrid system with PV pro's

- LZC technology use.
- Suitable for us with traditional radiator system.
- Back up available for if either the gas fired boiler or ASHP breaks down.
- Can be added at a later date after the heating installation as funds allow.
- Reduces running costs of the whole building by 80-90% with battery storage.

Hybrid system with PV Con's

- Higher installation cost.
- Newer technology therefore no real data beyond 10 years on the ASHP side.
- Planning permission required for the ASHP and PV solar prior to installation.
- Three phase electricity supply required
- External compound required to locate the ASHP plant
- PV Panels are preferably required to be mounted on the roof.
- Makes roof maintenance more difficult.

#### **Budget Installation Costs.**

With the current rate of inflation, it is difficult to provide budget installation costs for heating installations as the prices for plant, equipment and tube is constantly changing however, a rough guide to the approximate costs of each type of installation are noted below. The budget costs are approximate for the prices available at this current time and could increase by as much as 10% within the next year. The only true way of obtaining an accurate quotation would be to have the installation designed and sent out to tender.

The budget costs do not include any heating design fees, architects' fees, planning permission fees or builders works costs.

#### Budget Installation Costs – Phase 1 Works

	<ul> <li>Installation of Gas service pipework</li> </ul>	£2800-£4400
<u>Bu</u>	dget Installation Costs – Phase 2 Works	
• • • •	Stripping out existing internal heating installations Installation of plantroom boilers / pipework and wiring Installation of new pipework and heat emitters within church Installation of underfloor heating pipework and manifolds Electrical wiring for new fan convectors BMS Controls installation	£ 3000.00 £23000.00 £51000.00 £19000.00 £ 6000.00 £15500.00
•	Total budget cost for phase 2 works	£117,500.00



#### Budget Installation Costs – Hybrid System ASHP – Phase 3 Works

•	Electrical wiring /	new distribution boards	£ 7000.00
•	Installation of Air source	heat pumps & buffer	£53000.00
To	tal budget for Phase 3 wa	orks	£60000.00

#### Budget Installation Costs – Hybrid System ASHP & PV – Phase 4 Works

10kW PV installation with battery storage budget cost £32000.00

# The above are budget costs only and are based on current prices and does not include professional fees or builders works.

#### **Supplementary Information**

Approximate Running Costs:

Running cost of a 160kW ASHP based on a 40p kWh charge from the suppliers for an 8 hour heating day would cost £120.00 in electricity charges plus standing charge.

Running cost for 160kW gas fired boiler based on 11p kWh charge from the supplier for an 8 hour heating day would cost  $\pounds$ 14.68 in gas charges plus standing charge.

The solar PV Installation would therefore be essential to install should ASHP be considered for use. Phases 3 and 4 can be changed around to enable the solar to be fitted before the ASHP.

The running cost of the 160kW ASHP post solar installation would be between £84-96.00 per 8 hour heating day which would reduce further with solar battery storage.

Trusting the above meets with your approval, should you have any queries or require any further information please do not hesitate to contact me.

Kind regards

EEVarney

Emma Varney - BEng (hons)

Design Engineer / Managing Director.

# **Appendix Six : HTS Response to DAC Feedback** following site visit 13/02/2023

ITEM/ISSUE RAISED/REQUIRED	ACTION TAKEN/RESPONSE				
Usage table for the proposed development and spatial analysis	An overview of current and proposed activity and spatial usage – see pages 29 and 30				
Timeline of project's development	A brief review of the Heritage Project and Transforming Trinity from 2012. See pages 23 and 24.				
Analysis of options considered and discounted with budget costs	Pages 25 to 28. Illustrations of options, both Heritage Project and Transforming Trinity. Costs where known.				
Fundraising and grants.	Notes on funds – see page 36				
NB. The PCC noted the request to comment on fundraising and grants.	The sale of 62 Park Crescent, £395,000 Monies already given by church members £83,000 Pledges made £330,317 (less £83,000 given) £247,317				
	Trust funds £125,000 Total = £850,317.				
<b>Fundraising.</b> In their seminars on promajority of the funds will come from the visiting the whole church community in shown in the figures above.	<b>Fundraising.</b> In their seminars on projects and fundraising, Action Planning advise that the majority of the funds will come from the congregation; the "home team". One reason for visiting the whole church community individually was to ask about finance and the result is shown in the figures above.				
We have set a realistic target of £1.1million for the project, with the strong possibility of grant making bodies supporting a community hub development, however we are mindful that we have not yet got an agreed development about which we can apply for funding.					
We were encouraged by the DAC site visit that this kind of development could attract support from the Diocesan Development Fund.					
Our intention is to get the support of the DAC for our plans which we can then confidently use to make applications for grants and we have identified among othersAllchurches Trust, Church Buildings Council, Historic Churches Trust, Garfield Weston Foundation, The Hobson Charity, The Laing Family Trust, National Churches Trust (Cornerstone grants), Esmee Fairburn Foundation, Fisherbeck Charitable Trust, Joseph Rank Trust, The Liz and Terry Bramall Foundation, The Trusthouse Charitable Foundation, National Lottery (Community / Heritage). We also have a close connection with the Carluccio Foundation.					
Spaces justification – general and individual	Narrative on pages 12 to 16. How building a new space releases an existing space.				
User identity & requirements	Page 30.				
Evidence of interest	We know that all existing users will be catered for.				
rooms and spaces that don't exist. We Village Hall bookings) how many group	<b>Interest.</b> As with fundraising, it's difficult to market and gauge the potential for new usage on rooms and spaces that don't exist. We know (because our churchwarden is responsible for Village Hall bookings) how many groups are turned away from a fully booked VH, in particular, spaces in the morning for art and fitness classes and social gathering.				
The long experience gained at the CMI gives confidence that the facilities will be well used despite the gap in time between the loss of that building and now.					

Re-assessment of historical Statement of Significance	S. of S. adapted and new information incorporated
Proportions/aesthetics/internal light levels	Addressed within the justification, pages 21 and 22. The issue of light levels on pages 33 and 34.
Additional café seating.	The larger re-designed west end extension creates a
The inside / outside relationship	space similar to that at the west end of the nave. We believe this vital "outside space" addresses the issue that many people feel reserved or negative about entering a church building.
Internal elevations	Additional supplied with 1650L2010revA and 11revA
Planned location of font	In line with the pillars in the space in front of the
(NB – away from partitions and other structures)	"crucifixion window", south aisle. The majority of christenings are small gatherings not in services. This space will create a lovely environment for the service.
Tiled floor surrounding font	We plan for the existing tiled surround to be re-used in the new location.
Excess of new spaces ground floor	We have reduced the planned spaces
Excess of new spaces 1 <sup>st</sup> floor	We have reduced the spaces on the 1 <sup>st</sup> floor
Excess of aisle partitioning	Removed
1 <sup>st</sup> floor storage area	Relocated in new design
Obscuring stained glass windows	Eliminated in new design
Partitioning design. (Nave) (glass panels that can be fastened securely)	We believe these will be essential to delineate the worship space and social area on most occasions, but when required can be slid aside into the line between the pillars (see the heavy black line).
Lack of evidence for 1 <sup>st</sup> floor spaces	Addressed – upper room replaces the north transept.
Placement of stairs and lift	Relocated in new design
Sightline interference of west window	Eliminated in new design
Servery not central	Relocated in new design
Servery timber finish	Noted. Included in new design will be sympathetic finishes relevant for the church.
PCC to compromise – reduce room/ spaces request	Included in new design.
Evidence for justification of 1 <sup>st</sup> floor	Supplied. The upper room replaces the north transept and creates a uniquely stunning space.
North side porch extension	Rejected as option by HTS - see pages 25/26
West end glazed extension	Removed. A new sympathetic extension is proposed utilising "the language of the building"
Café signage	The issue is not signage to tell people the church has a café inside, but overcoming the reluctance to go inside.