

# Report on the Church Fabric (Buildings) activity 2020

## 1 Introduction

This report discusses work carried out and investigations completed on the fabric of the Uplyme Church Building for the period 1<sup>st</sup> January 2020 to 31<sup>st</sup> December 2020

The report follows on from the report for the previous year and reports to the PCC in 2020.

## 2 Health and Safety,

The following is a list of Health and Safety incidents, defects and maintenance activities that have been reported and rectified or carried out through the year. There is no significance to a topic's position in the list as to their seriousness.

### 2.1 Health and Safety Incidents in 2020

There were no health and safety incidents reported during the year.

### 2.2 Covid 19 Restrictions in 2020

Due to Covid 19 restrictions the Church was closed for extended periods.

All items, used for the preparation of hot drinks or food, such a Coffee Machines and Kettles were removed from the kitchen area and put into storage where they remain.

Whenever the Church was open, a member of the Church community acted as a steward to ensure that a record of attendees has been kept.

### 2.3 Balcony Safety Screens into the main body of the Church Nave

In 2015 it was reported that Safety Screens between the balcony viewing area and the Church Nave do not comply with Health and Safety requirements. They are too low.

A long-term solution requires changes to the safety screens in the balcony arches. In the immediate short-term the balcony viewing areas are sometimes temporarily screened off to prevent access. When these screens are removed short-term advisory notices are installed warning of potential risks and that adult supervision is to be provided whenever children are present in the balcony area.

The onset of Covid 19 restrictions has meant that nothing has been done about this issue.

### 2.4 Safety Screen into the Church Nave at the East End of the Balcony

In 2019, the obvious balcony safety hazard caused by removal of the Pipe Organ was mitigated by the installation of a temporary screen at the east end of the balcony overlooking the area formerly occupied by the Pipe Organ. The screen runs balcony floor to ceiling and was designed to stop people falling over the low rail into the area one floor below.

This screen has been inspected by Church authorities and we are required to replace this screen with something more fitting for a Church. Long term, we must have a safety screen, the hand rail is low, the fall is large, we must comply with Health and Safety.

Informal discussions with our Church architect suggested that the ideal remedy will be to replace the screen with a row of bespoke cupboards across the east end of the balcony, providing much needed storage space and closing off the significant fall hazard at the end of the balcony. Such an installation will require a Faculty.

First steps are provision of architect drawings, leading to a presentation of a Faculty. No work has yet been carried out to bring this idea to fruition in 2020.

The existing safety screen remains in place, despite Church authority opposition.

## **2.5 Worn Carpeting to Balcony Stairs**

In 2018 it was reported that the carpet to the balcony stairs is badly worn creating a trip hazard. The hazard has been mitigated by the use of carpet tape over the worn areas to render the steps safe to use. The use of tape is a temporary measure and, in the longer term, there is no alternative to replacement of the carpet, or its complete removal leaving just bare boards.

When the Balcony temporary screens are finally and completely removed it is recommended that the balcony carpet be replaced.

## **2.6 Fire Inspection Recommendations**

In 2017, a fire safety inspection was carried out.

The recommendations discussed in the report for 2018 have been largely carried out.

There remains one outstanding recommended action: a Smoke Alarm should be installed in the Vestry Office.

An initial investigation in 2018, with a domestic style fire alarm, revealed that if the alarm sounded, and the vestry door was shut, the alarm was not noticeable in the main body of the Church, or vice versa. This suggests that radio connected fire alarms throughout the Church are needed to ensure that any person, in any area of the Church, can hear the alarm.

Theoretical assessment work on the various types of fire alarms that are readily available has been carried out, and it will be possible to install sufficient radio connected fire alarms. As a minimum 5 alarms will be required for Balcony, Nave, Electrical Switch Room, Chancel and Vestry. However, further work is required to ensure that the radio waves from the fire alarms penetrate the Church walls – this is a known issue with our Church. If this work is unsuccessful a directly wired, more expensive installation will be required.

Work on the fire alarms was put on hold until the final use of the space vacated by the Church organ, now used as a storage area, and the revised use of the vestry is agreed.

It should be noted that the temporary storage area has a fire path to the vestry, via the electrical switch room, because it is separated by a wooden wall to the electric switch room, and the switch room does not have a fire door to the vestry.

## 3 New Problems

### 3.1 External Light Disintegrates

The external light to the North West corner of the Church disintegrated during the Spring depositing its glass shade on the path in a storm. The light was replaced in the summer of 2020.

### 3.2 Roof Leak into the Balcony Staircase

On Wednesday Aug 19<sup>th</sup> there was dramatic water leak when water poured into the Church above the balcony stairs. The leak was really significant and made very obvious due to the very heavy rain that was falling at the time. The leak is located where the pitched roof over the balcony stairs meets the Tower wall.

The leak was described at the time as follows:

- under conditions of heavy rain, water from the roof forms a stream that flows down the left-hand wall of the balcony staircase adjacent to the gate separating the bell tower ringing floor from the balcony staircase. The stream flows over the wooden step at the bell ringing floor entrance and onto the stone step at the top of the staircase. The water disappears through joints in the stone step into a void under the staircase.
- There is no evidence of water penetration into the fabric of the Knave or the Church Tower.
- There is an awful lot of water flowing under conditions of heavy rain – it is much, much more than an incessant drip – it's a deluge.

#### The Investigation

Two problems were found

- 1) At that point where the pitched, slate roof over the balcony staircase meets the external tower wall, there is a lead gutter that is designed to take rainwater away toward the west parapet. The gutter passes through a square hole in the parapet wall to deposit the rainwater into a hopper feeding the rainwater down pipe. The gutter was filled with a mixture of sticks and other flotsam typical of a nest made by sea gulls. The large volume of water deposited on the pitched roof had caused the nest/debris to follow the flow of water and it had become jammed into the square hole in the parapet wall, effectively creating a dam that stopped the rainwater from running away. The triangular volume of the roof and vertical tower wall was filled with water to a depth of at least one row of slates, possibly more (at least 200cm [8inches] deep across the full width of the balcony roof). The water from the roof had found a way around the lead gutter and was pouring through the ceiling above the staircase, thereby stopping the triangular volume from continuously filling with water, which would ultimately have been to a depth of over metre or several feet.
- 2) A further investigation showed that the stone / cement flaunching, that protects the edge of the pitched slate roof as it rises against the West wall of the Church, had failed where the drain pipe from the Tower roof discharges water into the lead gully. Effectively a hole was opened up directly into the ceiling below and the Tower down pipe was discharging directly into the balcony area – hence the appearance of stream running down the wall.

#### The Remedy

- 1) Initially the gutter was cleared by the roofing contractor who maintains the Church Roof.  
This helped, but did not resolve the issue.

- 2) The hole in the Flaunching was difficult to find, it was obscured by the Tower Roof drainage down pipe, but once identified was repaired using Lead sheeting to re-make the flaunching.

There is no evidence of any further leakage.

#### Follow Up

The plaster on the Church wall, which has been thoroughly soaked, is being left to dry. After 2 years (i.e. in 2022), if there has been no recurrence and the wall has now dried out properly, the wall will be re-painted to cover all the staining that the water cascade produced.

### **3.3 Stone Lining to South West Corner of the Nave**

The quinquennial inspection completed in late 2019 produced a report delivered in January 2020. The report highlighted an urgent problem, requiring immediate remedial action, to the stone lining of the Nave South West corner - some parishioners may remember that was where the flags used to hang. There was a risk that the honey coloured stone lining was separating from the outside supporting wall, due to corrosion of the cast iron cramps used to locate the lining. In consequence, there was risk that the stone could fall and injure people.

Between 23<sup>rd</sup> and 30<sup>th</sup> September, the Church was shut and the stone lining to the Church walls in the southwest corner was removed and re-installed. New stainless steel fixings tie the lining to the outer wall.

The work revealed that the top half of the lining had no supports whatsoever, the cramps had completely corroded away. The lining stood up merely because of gravity. An obvious safety risk spotted by the Quinquennial surveyor.

In addition, similarly corroded ties for other stone panels, to the west of the south door and above the audio control unit, were also replaced.

Thanks are owed by everyone to the working party who spent a lot of time removing the dust in the Church – the amount had to be seen to be believed – best part of a full dustbin.

### **3.4 Mortar Droppings where the Barrel Ceiling meets the Tower Wall**

From late 2019 through 2020 there have been occasional droppings of mortar crumbs from the top of the Nave Barrel Ceiling where it meets the Tower Wall.

Whilst the scaffolding tower was in the Church, in use on the stone lining in the southwest corner of the Nave (see report at 3.3), the Ceiling timbers were tested for dampness at its junction with the tower wall. The ceiling was found to be dry and there is no evidence of Dry Rot.

The mortar crumbs are assumed to be the result of drying of the roof structure and shrinkage of the Barrel Roof timbers. The mortar appears to be a filler between ceiling and Church tower.

It should be noted that there used to be a water leak in this area several years ago, but it has long since been fixed.

### **3.5 Mortar/Plaster falling on the New Organ**

During the course of the Summer, it was noted that Mortar Crumbs / Plaster crumbs were falling onto the organ and the organ stool from the supporting arch above the organ that separates the Chancel from the area formerly occupied by the Church Pipe Organ.

It is assumed that water ingress, sometime in the past, is the ultimate source of the problem, because there is evidence of water ingress into the structure of the Arch. There is no evidence of any dampness now.

It is known that repairs have been carried out to the roof lead guttering that runs between the Balcony pitched roof and the Nave / Chancel pitched roof, along the line of the arches in the Church.

The mortar/plaster crumbs are due to the crumbling and separation of a mortar/plaster cosmetic lining from the underlying arch stonework. The cosmetic outer layer is used to make this arch look like the arches in the rest of the church. The only effective solution is to remove the existing cosmetic layer and replace it with new.

Initial investigation has revealed a rough stone arch underneath the cosmetic finish. Our architect requires a structural engineers survey of the Arch. An engineer has been contacted but his availability is not yet established, and we may have to find an alternative.

Remedial work will not be easy and could be expensive, to provide what is, at best, a cosmetic solution. No further falls of plaster have been seen since the initial investigation. At the moment, the situation is being monitored to see if there is any return of dampness or further falls of mortar/plaster.

Meanwhile the organ has been moved to ensure that the organist is out of harms' way should there be any further falls of plaster.

### **3.6 Intermittent Operation of the Church Floodlights**

The Flood Lights were reported as causing a nuisance because they were on very late, and one light was flashing intermittently.

Investigation showed that the time clock was several hours out, causing the lights to come on at the wrong time of night – very late. The time clock has been reset. The problem arose after a power cut lasting several hours and this was probably the root cause. There have been no time problems since.

A replacement light bulb and ballast, to resolve the flashing, was fitted during the summer when other electrical work was carried out.

## **4 Previously Reported Problems and Maintenance**

### **4.1 Update on Old Problems**

#### **4.1.1 Electric junction boxes at the base of Church Path Lights**

As reported last year, there was an intention to replace the metal junction boxes at the base of the Church Path lights with fully waterproof ones to minimize the risk of water getting into the path lighting circuits and stopping the lights from working. This work was duly completed in August after an appropriate dry period.

#### **4.1.2 Restoration of the Victorian Font**

Guidance has been received from Church Authorities that the Victorian font has to be re-installed in the Church.

The font, which was stored outside, was refurbished, re-assembled and installed in the Church - at a location agreed with the Church Authorities - by our farmhouse neighbours at their cost as a gift to the Church.

The restored font may not be used as a working font (a church is only allowed one font in use) and is to be known as the Parke Memorial – after the name of the original benefactor. The font has a suitable lid to prevent its use.

## **4.2 Maintenance**

### **4.2.1 Lead Roof Repairs**

The roof valleys and gutters, all lead lined, were cleaned in October as part of the annual roof service. For the first time in many years, no new patches were applied.

As usual, the roofing contractor warned that the lead is really getting wafer thin and will not last much longer in places.

### **4.2.2 Water leak at base of windows to the East of the South Door**

When heavy rain is blown against any of the windows to the east of the south door, the resulting rainwater enters the Church under the window instead of draining to the outside. The problem is caused by crumbling of the mortar filler at the base of the window. At some time in the past this has been patched with modern synthetic filler. The synthetic filler is now peeling away as the mortar continues to crumble.

An attempt has been made to stop the rainwater blowing into the church by:

- removing ineffective synthetic filler at the base of the Church windows,
- removing the crumbling mortar behind the filler,
- sealing the void (where the crumbling mortar is located) beneath the windows with synthetic filler of the type used to seal lead sheet to church stonework,
- covering the new synthetic filler with lime based mortar.

The effectiveness or otherwise of this work will be monitored to see if it requires further work.

### **4.2.3 Tower Roof Repair**

A tiny split - less than 1cm – found in the Cooper roof during the Quinquennial Inspection was patched.

### **4.2.4 Annual Gas Safety Check and Boiler Maintenance**

The annual boiler maintenance and Gas Safety Check was carried out mid September. A Gas Safety Certificate was issued.

The good news is that the Boiler again passed its check-up – just.

As previously reported, Boiler inspections have revealed that the Cast Iron heat exchanger is getting thin. It is still functioning and was judged to be suitable for another year of service.

We must plan to replace the boiler within the next 3 years, and possibly sooner if the Boiler were to spring a leak.

As in previous years, the maintenance check noted evidence of intermittent boiler room flooding, although not at a level to shut down the boiler. The boiler room is below ground.

#### **4.2.5 Annual Fire Extinguisher Check**

A satisfactory annual fire extinguishers maintenance check was completed.

#### **4.2.6 Electrical Safety Check**

An electrical safety check was satisfactorily completed..

#### **4.2.7 Update to the Church AV system**

The onset of Covid 19 restrictions resulted in Church closure and the introduction of on-line Church Services.

In order to provide an on-line Church services capability, a faster up-link than that provided by the Church Broad Band capability was required. Agreement was reached with Mrs Ethelstone's School to piggy back on their fast broadband.

To facilitate this capability a temporary wired connection was installed between the Church AV system and the school, to provide access to the school's broadband.

Longer term it is expected that a wireless, low power, microwave link will be installed between the Church and School to provide a more resilient and faster link to the School Broadband capability.

Monitoring of the Church Service take up suggests about 100 people view the Uplyme Church services each week.

#### **4.2.8 IT Facilities**

The Church Computer and Apple TV used for wireless communication to the Church AV system have been automatically updated with new operating systems to maintain security and performance.

## **5 Longer Term Fabric Activity that will require Authorisation**

### **5.1.1 Disabled Toilet Facility**

Initial explorations on this capability have been re-invigorated and initial sketches have been supplied to the Church architect for consideration and follow-through to establish the art of the possible.

Sketches under discussion expand the existing toilet to dimensions suitable for wheelchair users.

Due to work pattern constraints arising from Covid 19, progress on this has been slow.

When viable schemes are available these will be discussed with the Church Authorities and made available to parishioners via the PCC.

### 5.1.2 2016 Church Organ Replacement

The space left vacant by the new organ installation is screened off with curtains and is currently being used as storage space. This is a temporary use and ultimately the area may be re-used for other purposes. As yet no new purposes are under consideration

### 5.1.3 Boiler Replacement

An estimate was received in November 2019 for replacing the boiler as a complete installation in the newly refurbished Church shed. The system employed a heat exchanger in the existing boiler room, so that no changes would be required to the existing pipe work or radiators installed in the Church.

The price at circa £14,000 was a lot higher than expected. Additional costs, up to circa £5,000 will be incurred to secure permission for the installation and excavation of part of the churchyard path between the boiler room and the newly refurbished shed.

Arising from the startlingly high cost estimate for the replacement boiler, ideas are being re-explored using the following terms of reference:

- 1) The existing radiators and pipe work in the Chancel, Nave, Balcony and Vestry / Office should not require change in any way. This is a low-pressure system, and MUST remain so, to minimise any impact on the existing Church Central Heating fabric.
- 2) The fabric of the Church Building should suffer minimal impact and preferably none at all.
- 3) Digging in and around the church should be avoided if possible, to avoid the expense of supervision and oversight of the work by expensive professionals.
- 4) Carbon Neutral solutions should be explored.

At the moment alternative ideas are being solicited following an initial discussion with the Church Architect.

(Post Report Note: The discussions with the architect are slow due to disruption to work patterns caused by Covid 19).

## 6 Quinquennial Inspection

A Quinquennial Inspection of the Church took place on 29/11/19. The report was issued in January 2020.

As usual a number of findings warrant further work, most of which are not new but some now require work.

Advice for immediate work is:

1. The Control of Asbestos Regulations 2012 apply to all non-domestic property and by law an asbestos survey should be carried out. Surveys can be done at different levels and a maintenance survey is probably most appropriate. See HSE website [www.hse.gov.uk/asbestos](http://www.hse.gov.uk/asbestos).  
The PCC will commission a report when the Boiler is replaced because that is the only site where there is likely to be any asbestos.



2. Further investigation of the rusting cramps at the western end of the Nave South wall is needed,  
This has been acted upon, see 3.3

Advice for future work that can be readily undertaken within one year:

A The tower roof has two small fractures in the copper roof, these need to be repaired, but are not listed as urgent.

One has been acted upon - see 4.2.3, the other could not be found.

B Repair fractured rainwater downpipe to Chancel.

There is no immediate work planned as the fractured downpipe, it still functions properly.

C Repair/patch lead around west window.

This is checked each year during the annual checks on the lead guttering. Will be treated as on-going maintenance.

D Repair Coping and Render to Vestry North Gable

This has been acted upon when the roof was cleaned.

E Repoint joints to Porch copings

F Redecorate Chancel Gutter

G Re-paint iron bell frame to minimise corrosion

Advice for work to be carried out that needs specialist help, in some cases over 5 years:

a) A parapet on the west wall has a horizontal fracture that should be pinned

b) Investigate, Monitor and Repairs to nave interior ashlar lining

c) Renew North Valley gutter

This is the Church Roof lead work that is the subject of annual inspections and is patched accordingly. Replacement is expensive and will only be undertaken if we have the funds, in the meanwhile patching will continue.

d) Renew plastic rain goods in cast iron (around the porch).

This task is cosmetic, is designed to provide a "Church Look" to the rainwater goods, and to ensure they have a very long life. The rainwater goods will be changed only when the existing plastic components reach the end of their useful life.

e) Investigate cracking of the eastern arcade column and remedy as necessary.

This is being monitored for movement and change.

It should be noted that a roof leak immediately above this problem has been fixed and everything is drying out nicely. It may not be a long-term problem. The architect is content that we monitor this issue at the moment.

Geoff Linsley

PCC Member responsible for Church Fabric.