



# Church Renovations

what • when • how

Adult Forum – Sunday, April 30, 2023



## **We need a new roof!**

The need is clear. The time is now.

- 75-year old roof
- Water damage inside and out
- Structural failings

Priority one is stabilizing the building.



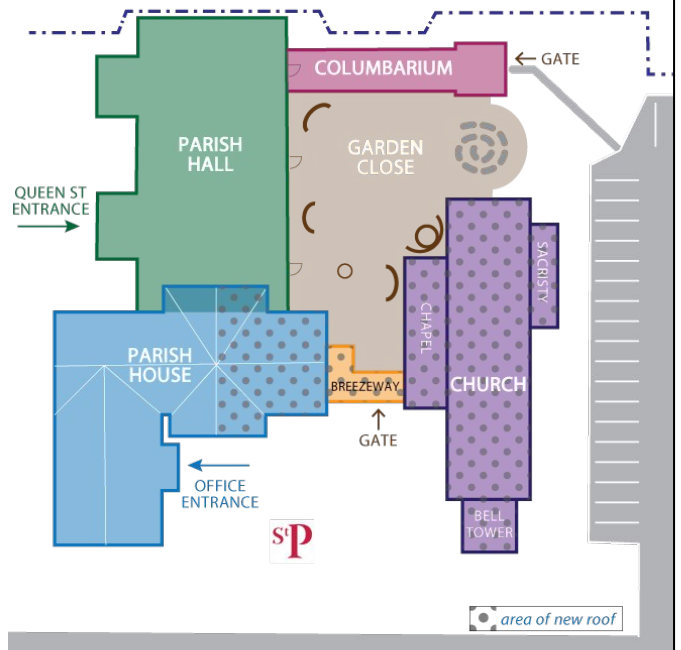
We have known for some time that our church roof is at the end of its life. However, due to the pandemic and clergy transitions, we haven't been able to deal with it over the past few years. This fall, with water actually dripping in the church, it became clear that we cannot wait any longer.

The roof is almost 75 years old. It was put on in the late 1940's - about the same time as the Parish House was built. It has lasted this long because it is made of asbestos. But now, it is no longer keeping the water out, and there is damage to the inside and outside of the church.

The church is the home of our lives of faith together. It is a gift from the generations who came before us, and now we need to steward it for the future.

## What's going to happen?

- New Roof
- Stone Cleaning
- Structural Repairs

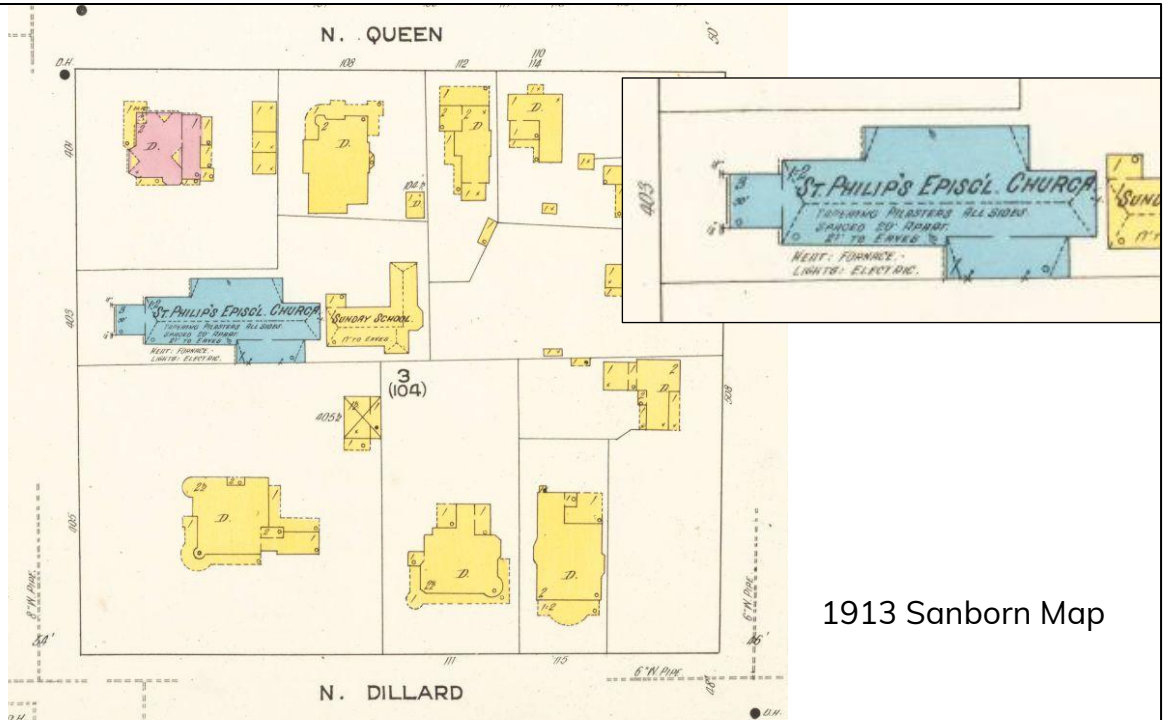


So, this summer we are going to deal with our most pressing problems.

We will put on new roofs over all the areas shaded with polka dots: the church (purple), the breezeway (orange), and part of the parish house (blue).

We will also clean the stone exterior of the church and make structural repairs to the church.

You'll notice that this list doesn't include any interior work or other campus items. We will talk more about that later in the presentation.



1913 Sanborn Map

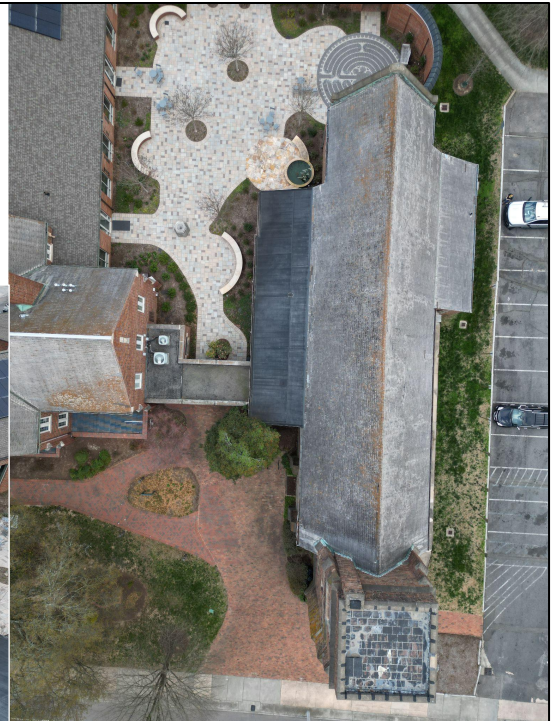
One of the first things that we did with this project was historical research. This 1913 Sanborn Fire Insurance Company map shows our block. The blue color indicates a building made of stone. Red indicates a brick building, and yellow indicates a wood frame building. Looking at the detail image on the side, you'll see small circles in the lower corners of the blue building. Those circles are symbols that indicate that the roof of this structure is made of stone, which in 1913 meant a slate roof.

So, our church originally had a slate roof. This got us thinking about whether we could restore that historic feature. We priced it out and were pleasantly surprised to discover that a slate roof was not dramatically more expensive than a shingle roof, and so we started to go down that road with the project planning.

Well-maintained slate roof can last 80-100 years. Natural material - not made of petroleum - not sent to landfill. 2-3 shingle roofs in the course of 1 slate roof lifetime. A slate roof is an investment in future generations and a commitment to the stewardship of our historic building.

## ROOF

- Slate on the Church
- Bell Tower and Breezeway
- Shingles on the Parish House
- Asbestos Abatement



So, we are planning for a slate roof on the church, but this roofing project is more than just the church.

In the picture on the right, you see the long church building, with the sacristy bumping out on the right and the chapel (darker roof) bumping out on the left. All of that will get the slate roof. At the bottom of the right hand picture, you see the square bell tower. That has a flat roof that desperately needs replacing – the bell tower is leaking terribly. The breezeway connecting the church with the parish house is another problematic flat roof. It slightly slopes down towards the church, causing water to collect up against the building. The roofers will correct the pitch of the roof so that water flows into the gutters and will also protect the stained glass window that is over the church side door. The shingles on three facets of the parish house roof (shown in the left hand photo) are original to the building and the same asphalt shingles as on the church. They will be replaced with asphalt shingles to match rest of the campus. New flashing, gutters and downspouts will also be installed.

As mentioned, several of these roofs have shingles made of asbestos. We have a roofer, environmental engineer, and specialty abatement contractor working together as a team. The shingles will be removed by hand, bagged up on the roof, and then carefully handed down to the ground and put into the hazardous waste dumpster. We are following all safety protocols. While this work is happening, the church will be sealed up with air filters running to capture any dust. The main concern is for the health and safety of the workers involved, and they will be protected and monitored. The area will be safe for people on the ground and in the community.

If you have any questions about this process, please reach out to Liz Sappenfield, Junior Warden.

## STONE

- Cleaning over entire church
  - Removes loose fragments
  - Improves stains
- Selective repointing at roofline
  - Keeps out water



The stone on the exterior of the church is brownstone. Brownstone is a sedimentary rock – made out of layers that have accumulated and formed into rock – and naturally flakes over time ('spalls' is the technical term you'll sometimes hear), but this process is being accelerated by the dampness in the walls from the failing roof. In the left hand photo, you can see a vertical stone with a flake at the outside edge (notice the dark line running vertically along the edge). The stone above this has already lost a flake – you'll notice a lighter colored area where the exterior has gone and the darker color of the weathered exterior of the rest of the stone.

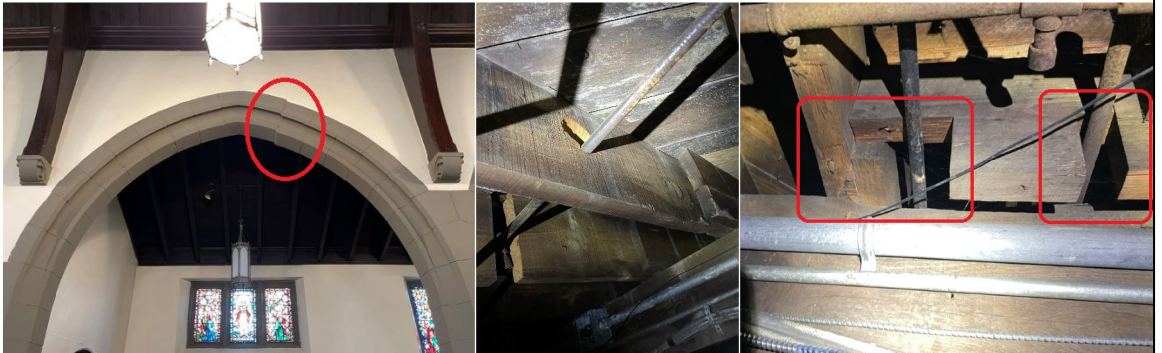
We will clean the whole exterior of the church, and this process will remove any loose fragments and deal with dark stains.

The masons will also repoint (install new mortar) the joints of the capstones in the North Wall (Good Shepherd window) and the bell tower. In conjunction with the new flashing, this will keep out the water. The middle photo shows a detail of the roof above the Good Shepherd window. The joints between the limestone caps will be repointed (new mortar) and new copper flashing installed. The new flashing will be bright and shiny like a copper penny at first and will gradually weather to the gray-green color you see in the photo.

There is more stone repair that needs to be done, but for right now we are only doing what is most necessary to keep the building safe and dry.

## STRUCTURE

- Repairing archway in church
- Replacing water damaged wood as needed
- Repairing structural support underneath the church
- Removing/relocating plumbing and mechanical ducts as needed



We had structural engineers assess the building to see if it could support the weight of a slate roof. Their answer was yes, it can. But while they were looking at the building, they noticed a few other things that it needs. One item is the archway over the baptismal font in the left hand photo. There is a stone in the arch that has slipped out of place (circled in red). The engineers don't think that it is about to fall, but it does need to be repaired.

They also looked at the structure underneath the church – is the foundation strong? (yes), is there water damage? (not much). There are some areas of flooring that have water damage, especially near the breezeway door, but overall the crawlspace under the church is dry. The main concern that they did note were several structural beams and floor joists that have been cut over the years in order to run plumbing and mechanical ducts. Those pipes will need to be removed or relocated and the beams repaired.



# CONSTRUCTION SCHEDULE

	year	2022												2023																											
	month	Dec	Jan			Feb			Mar			Apr			May			Jun			Jul			Aug			Sep														
	week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
Contractor Assessments & Cost Estimating																																									
Design & Engineering																																									
<b>Parish Communication: Adult Form (Apr 30)</b>																																									
Structural Engineering																																									
Structural Repair																																									
<b>Close &amp; Prep Church (1st week of June)</b>																																									
Asbestos Abatement																																									
Roof Replacement																																									
Stone Repointing																																									
Stone Cleaning																																									
<b>Return to Worship in Church</b>																																									

So, here is the schedule for all this work. You can see that we started with planning back in December, and we are now at the end of April, in week 17 of the year (highlighted yellow). There is a dark purple block to mark this Forum on April 30th. Next will come more engineering work and the structural repairs as soon as we can. Then, we plan to close the church in the first week of June to prepare for work. Pentecost will probably be the last service before we close the church. All the moveable furnishings and worship items will be taken out and stored in the parish house/hall. The church will be sealed up and prepped for abatement, and no one will enter it again until that process is complete. Asbestos abatement will be the next thing happening, then stone work and roofing in tandem, then several pallets of slate delivered to the parking lot, more roofing and more stone work. We expect to be returning to worship in the church in time for the start of our regular program year at the beginning of the fall.

All of the work will happen during the week - none on Sundays. Part of the parking lot will be used for construction staging. A construction fence perimeter and sometime scaffolding will be installed around the church. There will be some periods of limited access to the garden close (most likely in June-July). We have committed to the columbarium being accessible through the whole project.

Grace and the Comms Squad are working on signage and a schedule of regular updates. Be sure to read the Epistle!  
Use the new Queen St parking garage - it's convenient and free!

## WORSHIP PLAN

- Regular Schedule
  - 8 am - 9 am - 11 am
  - Same liturgies
- Parish Hall
- Social Hour



We met with staff at an early stage in the process so that they could plan for how to hold church during the construction. For simplicity's sake they have decided to keep regular worship schedule (8am, 9am, 11am with their same liturgies) and hold them all in the Parish Hall. Don't have to wonder when or where to go. Same schedule. Always in the Parish Hall. The room setup is likely to be different – we are thinking creatively about how we can use this space. Social hours may utilize the garden close or parlor/library or be a “movable feast.”

There may be some silver linings of this disruption. Different service groups will rub elbows and get to know each other. Opening our eyes to how to use our building. With a sense of flexibility and camaraderie – we're all in this together – we can make it work!

## PROCESS

- Started in December with architect Brandy Thompson, Clearscapes
- Historical Research, Engineer Evaluations, Contractor Assessments
- Lots of meetings: staff, worship team, finance committee, renovation task force, communications team
- Develop a Scope & Price it out
- Finance Committee Research & Recommendations
- Vestry Decision Making

### Renovation Task Force:

Ken Gasch & Robert Hallyburton (buildings & grounds)  
Ginny Bowman (finance)  
Lewis Moore (staff)  
Maryann Younger (clergy)  
Connie Semans (Senior Warden), Liz Sappenfield (Junior Warden)

This is the process of the project thus far.

We brought in Brandy Thompson from Clearscapes because she had already been working with the Campus Study team and knew the property and parish, plus she has historic preservation expertise. She has been invaluable!

We have had lots of site visits, phone calls and meetings. We put together a renovation task force to combine the different impacted areas for some collaborative thinking around decision points.

We looked at the big picture – what else needs doing (interior), what's on the wish list? – and put together a comprehensive project scope and priced it out. Then we went to the finance committee and asked for plan to fund it all. They did their research and came back with a set of recommendations, and since then we have been trying to fit the scope and the funding together. The vestry has had some decision making to do.

## Analysis

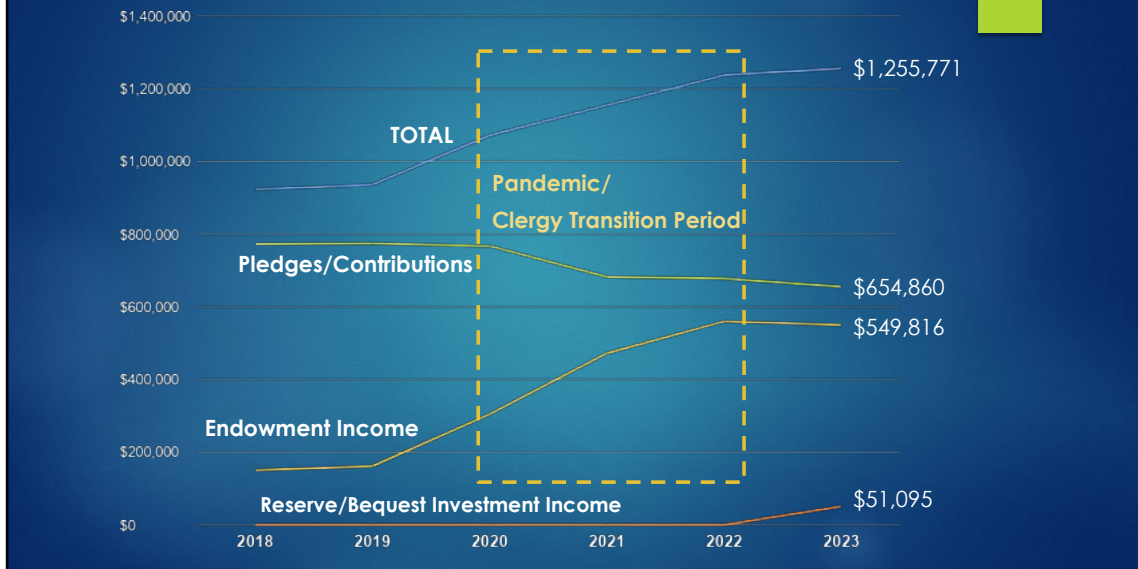
- Subcommittee:
  - Ginny Bowman, David Shumate, Richard Ammons, Paul Jacobson
- Process
  - Understand the urgent need
  - Find a way to do this without undermining budget, commitments
  - Make a recommendation to Vestry
- Existing Conditions – think back to the annual meeting...

The finance committee tasked a subcommittee of members with modeling funding plans and researching options.

Once they understood the scope of the project, they set about looking at options that could be accommodated without compromising the budget or existing ministry commitments.

To begin with, they took a look at where we stand now.

# Where does our money come from?



You'll remember seeing this slide at January's Annual Meeting. This shows our current budget of \$1,255,771. About 49% of that budget comes from pledged income (down from 68% in 2020), and 47% is funded by investment income.

One of the first things the committee asked was whether we could pay for the roofing project out of the endowment. But as you see here, almost half of our budget is funded by investment income from the endowment, and therefore any drawing down of the principal would severely impact the current budget. The bottom orange line is our short-term investment pool – a combination of reserve funds and an anonymous bequest of \$750,000 received in 2021. This money had been invested in order to generate additional investment income to make up for reduced income from the endowment after the most recent stock market downturn.

## Financing Options

- Conventional Loan
  - Interest rates 5.5% - 7%
- Line of Credit
- Self-Financing: Short-term Investment Pool
  - Cash operating reserve
  - Bequest from anonymous parishioner in 2021

So, realizing that drawing on the endowment was not an option, the committee looked to other options.

We explored a conventional construction loan, but the recent increase in interest rates made that an unfavorable option. Likewise, a line of credit was not supportable – the debt service placed too much pressure on the budget.

Finally, the committee looked to the short-term investment pool. This is a combination of cash reserve funds and money generously donated by an anonymous parishioner in their will. This money is unrestricted – the donor stated that they wanted it to be used for whatever the church needed most. The church urgently needs a new roof, and therefore we feel that this is an appropriate use.

## Recommendation

- Determine minimal project scope to stabilize building.
- Withdrawal from short-term investment pool not to exceed \$675,000.
- Retain \$425,000 in required operating reserve.
- Protect endowment principal to support the budget.

Based on this research, the finance committee submitted the following recommendations to the vestry.

**PROJECT BUDGET**

Roof	\$ 377,300
Stone	\$ 217,500
Structural Work	\$ 95,000
Organ Protection	\$ 3,000
Stained Glass Window	\$ 5,000
Interior Asbestos Abatement	\$ 3,000
Interior Deep Clean	\$ 3,500
Design + Engineering	\$ 45,000
subtotal	\$749,300
contingency	\$125,000
<b>TOTAL</b>	<b>\$874,300</b>

Available funds (finance committee recommendation)	\$675,000
Project budget	\$874,300
<b>GAP</b>	<b>\$199,300</b>

This budget represents the minimal scope of work that is necessary to stabilize and protect our historic buildings. It does not represent the entire scope of work the church needs in the next few years. In the next 2-3 years we will need to finish cleaning and repointing the remainder of the exterior, repair the interior plaster, paint, remove the carpet, and repair the floors.

You'll notice that the total budget, including contingency, exceeds the funds available. There is a funding gap of approximately \$200,000.



## Focus on the urgent need

- The roof cannot wait.
- Faith and hope:  
The slate roof is an investment in the future.



We can afford (within project budget) a standard asphalt shingle roof, but that is a 10-15 year solution and a higher-quality architectural shingle is a 30-40 year solution. The slate roof is moderately more expensive than architectural shingles and can be expected to last at least 80 years. It is also an environmentally sound choice and can be reused/recycled. Despite the budget gap, the vestry decided that the slate option represents the best long term financial and environmentally responsible choice. This is an historical legacy we can give our community, children, grandchildren and great-grandchildren. We will take a leap of faith and figure out how to bridge the gap.

## Phase the Project

- Continuing planning and design
  - Interior church repairs: plaster, paint, floors
  - Church improvements: accessibility, acoustics, technology
  - What else? (solar panels, inclusive restroom)
- Financial plan
  - Capital campaign
  - Grants and other sources
- Timing
  - Planning continues this year
  - Construction summer 2025?



The upside to phasing the repairs and renovations into two phases, is that it gives us more time to evaluate the interior scope of work. This would be the ideal time to make changes to improve acoustics, traffic flow, accessibility, streaming capabilities, and...? We would also be able to pursue grant funding (which often has a long lead time) and organize a capital campaign to support the project. The vestry has committed to completing the full scope of the project and not losing momentum.

## Ask for help

*We need your help to bridge the gap.*

*Please prayerfully consider a donation.*

*Can you increase your annual pledge over time?*

The bottom line is that we need to raise \$200,000 this summer to cover the initial phase. 100% of the vestry has made a financial commitment to this effort. We ask that you consider making a one time donation as well.

Just as importantly, we ask that you consider pledging or increasing your pledge over time so that we can reduce our reliance on endowment income (currently making up 43% of our annual budget). Imagine what we could do if we had several hundred thousand dollars each year to tackle capital projects or, more importantly, available for mission work around racial justice, poverty, hunger, and environmental stewardship! We would have the financial power to be real agents of change for many decades to come!



**Questions?**