St. Matthew's Church Building Renewal: Phase I

Building Integrity and Accessibility $1 million

As St. Matthew's prepares for the 100-year anniversary in its current building, in 2030, we are planning major renovations with two main goals:

1) preserve the integrity of the structure; and

2) improve the function of the building to meet evolving needs.

Working with our architects, we have identified a number of areas where persistent problems with water leaks reduce the habitability of the building. Otherwise, the building is structurally sound.

Some progress has already been made to address urgent health and safety needs. Starting in 2026 and continuing through 2029, about $1 Million will go towards repairs to the roof and the foundation to prevent water leaks and repair damage that has accumulated over a number of years. At the same time, work will be conducted to increase accessibility in the building, particularly to meet the needs of an ageing population.

Anticipated Timeline

Completed: Hazardous substances and air quality survey; stabilize northeast basement storage area; and improve lighting at building entrances.

2026: Replace roof over Brides Room and washroom; formulate plan and cost estimate for expanding first floor washroom; and formulate plans for waterproofing the foundation in the Choir Room and Electrical Room and replacing roof over Rector's Office.

2027: Waterproof the foundation and restore interior finishes in the Choir Room and Electrical Room; replace roof over Rector's Office (includes de-icing heat trace and improved drainage away from entrance to elevator); formulate plans for excavation and waterproofing the foundation along the east and northwest sides of the church; formulate plans for renovating the entrance to the elevator on the east side of the church; obtain grant funding for expanding the first-floor washroom and installing electric door opener on Baptistry Entrance.

2028: Expand first-floor washroom and install electric door opener on Baptistry Entrance; waterproof the foundation along east and northwest sides of the church; restore interior finishes to utility corridor and north corridor in basement; formulate plans for repair and/or replacement of the lower roofs on the east and west sides of the church.

2029: Repair and/or replace the lower roofs on the east and west sides of the building; renovate the entrance to the elevator on the east side of the building.

St. Matthew's Church Building Renewal: Phase II

Upgrade Heating System ~$1 million

St. Matthew's relies on a steam heating system built in 1930. Changes have been made over the years, but the current system is unreliable and inefficient. Emergency repairs cost about $10,000 annually, above and beyond regular maintenance and fuel costs.

A new report from Southface Engineering outlines three options for modernizing the heating system. In all three cases, the new system would meet the following goals: 1) Improve reliability and efficiency, 2) Adapt to changing patterns of use in the building, 3) Reduce the carbon footprint, and 4) Add air conditioning. All three options rely on air-source heat pumps that also provide air conditioning, a great degree of adaptability, and replace the use of natural gas with electricity, thus reducing carbon emissions.

Option 1: Retains the existing boilers for heat in the sanctuary and uses variable air volume (VAV) air handling units to distribute heat in rest of the building.

Option 2: Retains the existing boiler for heat in the sanctuary and uses variable refrigerant flow (VRF) for heat in the rest of the building, supplemented by electric coils as needed.

Option 3: Replaces the steam boilers and cast-iron radiators with low-temperature water in-floor radiant heating system in the sanctuary combined with a VRF in the rest of the building.

Total costs range from $785,000 – $1,380,000. The as yet unknown cost of upgrading the steam heating in the sanctuary is a large part of the estimated costs for Options 1 and 2, which are estimated between $785,000 and $1,151,500.

Option	Reduction in CO_2 Emissions	Annual Energy Cost*	Construction Cost	CO2 Produced (kg)
Existing system	**--**	**$15,803**		**66,526**
Option 1: VAV AHU heat pumps plus gas boilers	**68%**	**$38,612**	**$645,000 plus steam system renovations****	**21,545**
Option 2: VRF heat pumps plus gas boilers	**75%**	**$32,874**	**$671,500 plus steam system renovations****	**16,771**
Option 3: VRF heat pumps plus in-floor heating plus natural gas back up	**89%**	**$34,133**	**$1,381,500**	**7,462**

Notes:

*Energy costs for heating and cooling includes operation of all fans and pumps.

**Cost for steam system renovations are estimated to be $140,000 to $480,000.