



# IT'S TIME FOR US TO MAKE IT RIGHT

## *Part 5*

From *Steve Spangler Science*:

*Water is unlike [almost] every other liquid in the world, because it expands when it freezes. When water is frozen, it shrinks when it first gets cold, and then expands [by] about 9% of its volume as a liquid. For example, 10 cups of water will turn into 11 cups of ice when it's frozen.*

For those of us who live in Minnesota, this is not news. We see the damage done by freezing and thawing every year on our roadways. Potholes are ubiquitous in this climate because it takes only a tiny crack and a small amount of water to do tremendous damage when subjected to the freeze-and-thaw cycles of a Minnesota winter.

Home-owners know that streets are not the only surfaces effected by this problem, and church-owners know it as well. Here at Saint Thomas the Apostle, we've seen damage done to our buildings by 93 years of freeze-and-thaw cycles. Masonry around the windows of our school has broken and crumbled in some places. This has allowed water to get behind the bricks and cause further damage, in some cases infiltrating the walls of our school. This same phenomenon can be seen around one of the lower-level windows on the east side of our church.

In addition, we witness this kind of damage in a few places with our roofs – in the northwest corner of the church, around the fireplace chimney on the parish center, and around the flashing where our new gathering space meets the façade of the original church. Clay tile roofs in the Mediterranean last for centuries, but in the frozen north, they experience some unique challenges!

In addition to the water infiltration we experience due to freezing and thawing, we also see water entering the mechanical room of our church and school because our front lawn drains toward our buildings rather than away. We need to install a drainage system here so that the water stays outside rather than coming in.

When you consider that our church and school buildings are 93 years old, it's remarkable that the masonry and roofs have held up so well with so little maintenance. The quality of that construction done in 1925 was fine indeed.

The monies raised by our anticipated capital campaign will allow us to tuckpoint masonry around the buildings, rebuild the lintels over the windows in our school, repair the walls where plaster has been damaged by water infiltration, repair the places where our roofs are leaking, and install a drain for the storm water from our front lawn. It's time for us to make it right!



*Father Michael Reding*