



The fire started in an attached carriage barn (1), destroying stored family belongings (2). Abutting the barn, a butler's pantry was severely damaged as well (3). Smoke found its way into the main home via wall framing cavities (4).

Lessons From Restoring a Fire-Damaged Home

BY TUCKER FOSSIANO

Last January, I was contacted by homeowners whose house had caught fire a few weeks earlier, just before Christmas. Before calling me, they had reached out to a number of other builders, but none wanted to do the job. They sounded a little desperate, so I agreed to meet them at their home—an old, three-story Victorian built in the late 1890s.

Surveying the site, I saw that the fire had been largely contained to the home's attached carriage barn. A one-story section of the home (connecting the carriage barn to the main house) and the main house itself were mostly smoke-damaged. The couple told me that they had recently moved from out of state and had lived in the home only a few months. Compounding their problems, a lot of their belongings were still boxed up from the move and stored in the carriage barn when the fire occurred, which resulted in significant property loss. The displaced homeowners were living in a rental house.

Standing in their burned-out barn, I knew this wasn't an ideal job for us. Fire remediation work is messy, hazardous, and specialized—my company focuses on high-end remodeling and custom home construction. Also, years earlier, I had a bad experience doing remediation work through a franchised company specializing in emergency fire restoration. It was a nightmare dealing with the added levels of decision-making and an insurance company that battled us on pricing. But I felt bad for these homeowners—they were in a tough spot and new to the community—so I said I'd help them.

Within weeks of the fire. An emergency restoration contractor that had a working relationship with the homeowner's insurance company secured the site. It did some demolition work, installed a lockable temporary plywood door over the fire-damaged barn door, and dealt with the utilities (because the fire occurred in the unheated carriage barn, the home's heating system was not shut off). It also boxed up the homeowner's salvageable belongings in order to move them off site to have the acrid smoky smell removed from the items.

The insurance adjuster visited the site and determined that repairing the home was too big of a job for the restoration company. That prompted opening an insurance claim, which allowed the homeowners to hire a contractor to help them rebuild their home. The claim would be open for only a year, so the clock was ticking even before we were officially on board.



The demo work was completed within a week, with an excavator doing the bulk of the work in one morning (5). After gutting the home's one-story connector and sealing the framing with primer (6), the crew poured a new garage foundation.

THE PAPER CHASE

Before we could start construction, the insurance company had to develop a work scope. Its purpose was to define what was to be removed, what could be salvaged, and what new items would be needed to restore the fire-damaged home as close as possible to its pre-fire condition. What the company eventually produced was an 85-page report that was broken down so minutely that it was confusing and difficult to price out. The process of reconciling its budget pricing with what it would actually cost me to restore the home was much harder than I anticipated. Arriving at an agreed-upon project cost took nearly four months.

Work scope. The insurer wanted us to gut the smoke-damaged one-story connector, which contained the kitchen and a bathroom. The fire-damaged butler's pantry, which extended into the footprint of the barn, also needed to be removed. In the main house, plaster, lath, and insulation from the walls facing the fire-damaged barn needed to be removed on all three floors. Once the existing framing was exposed in these areas, it would need to be sealed with multiple coats of primer.

The fire-charred carriage barn had been built on an old field-stone foundation and had a wooden first floor with a crawlspace below it. The insurance company wanted us to tear it down and rebuild it on the existing cobbled-together stone foundation (the company was in full "replace-as-it-was" mode), while our clients wanted to use the rebuilt barn as a garage. There was no way I was going to build on an insufficient foundation. We had to prove that the woefully under-designed foundation and wood floor were structurally inadequate.

To do so, the insurance company wanted to use an out-of-state engineer with whom it had a working relationship (it wouldn't allow us to use a local structural engineer). It took a couple of

weeks for the engineer to schedule and visit the site, another two weeks for him to write his report, and a few more weeks for the engineering report to be processed by the insurance company. This process was a major factor in delaying the project.

Pricing. The insurance company's estimating is compiled from national data with percentage factors to account for regional cost differences. Some of its pricing is actually pretty good, but more often I found its work scope confusing and felt its formulas did not properly account for labor on a lot of the line items. Take, for example, the line item "10 lineal-feet of trim, reinstall." The \$0.87-per-lineal-foot allowance to install it doesn't account for the time required to go to the lumberyard and get the material, bring it the jobsite, set up a saw, set up a compressor, and cut it. In general, the company's pricing didn't seem to account for site visits, construction management services, or any intangibles that commonly occur during construction.

Having been low-balled on costs on the previous fire mitigation job (and a few flood-damage projects over the years as well), I was prepared to dig my heels in and not get bullied into doing the project for less money than it was going to cost. After trying to decipher the insurance report, I decided to price out the job like one of my typical proposals, then reconcile the project cost with the insurer later on. Doing this allowed me to wrap my head around the project's true cost, but also contributed to the project's delay.

When estimating a project, I typically take the job cost and calculate our O&P percentage on top of that to cover our project management services. But the insurance company calculated O&P into its individual line items. After battling with the company on this point, we relented and backed out our O&P percentage from our pricing and tried to make our profit margins through labor efficiencies and budget shuffling.



The existing ceiling and hardwood floors were removed in the connector's kitchen area. Wall, ceiling, and roof framing was primed and left "open" for three months to air out (7). The first-floor framing in the connector was primed approximately 8 feet back from the abutting fire-damaged barn location (8). In the main house, plaster, lath, and insulation from the walls facing the fire-damaged barn were removed. Here, the existing framing is primed in a second-story bathroom (9). Cabinets are being installed in the new kitchen (10).



REPAIRING THE HOME

After months of negotiating back and forth, we finally began demolition. We walled off the main house from the demo area with plastic and ran an XPower HEPA air scrubber (xpower.com). Wearing respirators and heavy-duty gloves and clothing, our crew gutted the one-story connector, bagging up the existing insulation and any painted materials. An excavator made quick work of the charred remains of the barn, compacting it into multiple dumpsters in one morning. We then masked off the upper two floors and removed the existing plaster, lath, and insulation from the walls adjacent to the carriage barn, all the while continuously running the air scrubber. The demo work was completed within a week.

Smoke mitigation. Priming the existing framing was pretty much the extent of our smoke-mitigation work. We left it open as long as possible to air it out, periodically sniff-testing the sealed framing at various temperatures and humidity levels. We primed the worst smoke-damaged areas with three coats of Bin Advanced Synthetic Shellac Sealer and spot-primed where we smelled hints of smoke. We then drywalled at the end of summer.

Changes. The main budget hiccup was with the electrical. The insurance company's work scope covering the electrical was

more broadly defined. Once we started demoing, the electricians found that a lot of the electrical wiring throughout the home was not up to code. The electricians were obligated to upgrade the service in order for the homeowners to safely re-occupy their house. I sent the insurance company an invoice from the electrician summarizing what was outside of their work scope, and the insurance company stepped up and agreed to pay for it.

Finishing up. After the drywall installation, finishing up the home was standard. We installed a new kitchen and bath in the salvaged connector, closed up the main home's walls with drywall and Roxul batt insulation, and built the new garage with generous second-story storage. A new mudroom, pantry, and stairwell extended into the footprint of the garage, similar to home's original floor plan. We also installed a one-hour firewall between the living space and unheated garage.

The homeowners moved back into their home in October; we are still trying to close out the project before the insurance claim deadline in late December. They are grateful for our work and are looking forward to a more peaceful holiday season this year.

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