

CITY

CANADA'S MOST EXTREME MAKEOVER



Built by lumber baron and MP Joseph Merrill Currier between 1866 and 1868, 24 Sussex Drive was acquired by the Canadian government in 1943 and became the official residence of the prime minister in 1951. Louis St. Laurent was the first prime minister to live there. The above photo was taken in 1951.

How the experts would fix 24 Sussex Drive

With the prime minister's official residence crumbling, **MICHELE OBEROI** asked three prominent builders how they would tackle the job.

It is clear that the prime minister's residence at 24 Sussex Drive, one of Canada's most prominent and historic buildings, is badly in need of repair. But what needs to be done to 24 Sussex to make it warm, dry and fully functional? And how much would it cost?

Leaks, drafts, peeling paint, blocked fireplaces, a seriously

outdated kitchen and a sun-room wrapped in plastic during the winter months are just some of the problems in the graceful old house, which was built between 1866 and 1868 by lumber baron and MP Joseph Merrill Currier as a gift to his wife, Hannah.

In 1951, Louis St. Laurent became the first prime minister

to live in the Gothic Revival mansion, which was acquired by the government in 1943.

The National Capital Commission has maintained the heritage building since 1987, and the agency is aware it needs some serious work. Unfortunately, the NCC says, there's not enough money to do the job.

The NCC is responsible for maintaining six official residences in the region, and was given \$37 million in 1999 to perform this task for five years.

Although the funding allotment officially ended this past March, the agency said it has \$2 million remaining, earmarked for 24 Sussex and the prime minister's official summer residence, Harrington Lake.

"We know that it's not enough," said NCC spokeswoman Anne-Sophie Lawless.

According to Ms. Lawless, a memorandum to cabinet is being prepared to request funds for future years but, until the funding is approved, the amount will remain secret.

While recognizing the ur-

gency of the situation at 24 Sussex, there are many projects that need to be completed in the various official residences, she said.

At Rideau Hall, the Governor General's residence, for example, about \$27 million has been spent on renovations since 1999, and much more work remains to be done on the 320-hectare, 28-building property.

At Stornoway, the official residence of the Opposition leader, \$636,000 has been spent upgrading the property

since 1999.

"All the important health and safety issues have been addressed," Ms. Lawless said.

Although the \$2 million allotted for 24 Sussex and Harrington Lake will not solve all the homes' problems, she said, "it's definitely funding that will go a long way to addressing the most pressing needs."

The *Citizen* asked three experts what they would do to deal with those "pressing needs" and improve this historically important Canadian home.

BILL TERON, DEVELOPER

'If you do a patchup ... you'll do a patchup again'

As president of the Canadian Mortgage and Housing Corporation, and deputy minister for the Ministry of State for Urban Affairs in the 1970s, Ottawa developer Bill Teron visited 24 Sussex several times as a guest of then-prime minister Pierre Trudeau.

Mr. Teron said renovating the home "would be a fun project." It would also be a historically and culturally sensitive project, requiring a deep understanding of the symbolism of the building and an ability to preserve its integrity, he said.

Before any work could be started, a "total analysis of the role of the prime minister" would have to be done, and consultations between the prime minister and his wife, the official residence committee and the technical crew would have to take place.

"It would be quite an involved process," said Mr. Teron, but an essential one to ensure the integrity of the home was maintained.

He remembers the furor over the indoor pool Mr. Trudeau had installed during his time in office, but now thinks the addition could be used to expand the residence without having to encroach on the grounds. By putting a second storey on the pool house, the home's area would be significantly increased.

"Twenty-four Sussex is a very small house," he said of

the 10,850-square-foot main building. "Now, with the number of meetings held there, (the prime minister and his family) require their private quarters."

This type of renovation, however, would require "a very sensitive integrated design."

Although Mr. Teron has not been inside the home recently, he has been following stories about its deterioration. He said fixing the home would be "costly, but not impossibly costly. The interior is a normal residential house."

Because old stone buildings often have little in the way of insulation, Mr. Teron said, "you'd basically have to build a new skin within the house." This would preserve the exterior, while allowing for upgrades in the infrastructure, including vapour barriers, insulation, modern wiring, air conditioning and better heating.

Currently, the home has radiators and no central air conditioning. In the heat of summer, window-mounted air conditioners are used. Prime Minister Paul Martin recently complained that 24 Sussex is cold in winter and hot in summer.

The house "needs a total restoration," said Mr. Teron. "It's far overdue now. A total renovation will not be more costly than a temporary one," he said. "If you do a patchup job now, in 10 years you'll be doing a patchup job again."



SANDY SMALLWOOD, ANDREX HOLDINGS

'An old house has lots of potential to be comfortable'

Sandy Smallwood says a house doesn't need to be cold just because it's old.

Lack of heat "is not a function of age, it's often a case of lack of maintenance," said the award-winning restorer of such Ottawa treasures as the Fleck-Paterson House, Davidson House and Panet House, all built in the same era as 24 Sussex. (Panet House, now the Embassy of Angola, was restored for less than \$500,000; Fleck-Paterson was restored for about \$500,000; and so far about \$100,000 has been spent restoring Davidson House.)

"An old house has lots of potential to be comfortable and warm." Generally, a house is cold for two reasons: problems with the heating system, or leaks in the structure. Before doing any work, Mr. Smallwood would arrange for an energy audit.

Standard energy audits cost less than \$200 after a federal government rebate is factored in, but a house as big as 24 Sussex might need extra work, Mr. Smallwood said.

Once the house has been well sealed, the heating system would need to be examined.

Hot water boiler systems are very efficient, said Mr. Smallwood. The disadvantage is boilers don't allow for central air. Still, air conditioning is possible. Mr. Smallwood said central air was installed in Panet House, which is the same age and size as 24 Sussex, for less than \$20,000.



One or two heat recovery ventilators could cool the house with minimal ductwork. The ventilators allow fresh air to be introduced to the building year-round and, unlike the current window air conditioning units, they allow windows to stay closed, increasing security.

Heat recovery ventilators cost \$3,000 to \$4,000, but there's a risk the cost could go as high as \$50,000, depending on how many specifications the government would force.

Once the obvious things are fixed, and the heating and cooling systems are working properly, Mr. Smallwood would look at innovative ways to make the home an energy-efficient showplace. Because of their mass, many old buildings already have an edge over new buildings for energy conservation.

"Masonry is actually a good building material when it comes to maintaining heat," he said, adding that the bit of fresh air that does sneak into old homes is beneficial. "You want the house to do a certain amount of breathing."

The installation of energy-efficient technology such as solar panels would make a strong statement and, even though the panels are expensive, they do conserve energy, he said.

Vegetation is a cheap energy-efficient option, he said, recommending deciduous trees on the south and west corners to block the sun. Ivy on the south and west walls would also help.

PAUL DENYS, DENYS BUILDS DESIGNS

'Older houses are more of a money pit than newer ones'

Paul Denys loves old buildings. "They're one of a kind," said the award-winning restoration expert.

"There's something about an aged house or an aged piece of furniture — you won't ever be able to replicate it." Still, "they have their issues."

If Mr. Denys were to work on 24 Sussex, he'd start with the house's approximately 90 windows. For about \$150 per window, including labour and materials such as simple weather stripping, "we can make the old windows function as brand new and airtight."

For another \$250 to \$300, he could remove any old wooden storm windows the mansion may have and put up no-maintenance aluminum storms to further improve the energy efficiency of the window.

New windows are also an option, but potential moisture buildup between the thermopanes is a concern. Mr. Denys prefers to keep the original glass, which may have served the home well for more than a century.

"I always like the test of time," he said, adding that a super energy-efficient window installed on a building that otherwise leaks like a sieve makes no sense.

If the heating system is more than 15 years old, upgrading it to a new, efficient system will increase the heat in the house without increasing the heating

bill. Anne-Sophie Lawless, of the NCC, said the central heating system in 24 Sussex was installed in 1984, and the home's windows went through a major rehabilitation in the 1970s.

Another way to warm up the house is through insulation. If the walls have a hollow cavity behind them, and if the wiring isn't the old knob-and-tube variety, cellulose insulation can be sprayed in.

Because 24 Sussex uses radiators, keeping the place cool in the summer is tricky.

"You can't get any cooling out of them in the summer," said Mr. Denys, suggesting a forced-air system as an option, providing care is taken not to damage the home's original plaster and millwork.

In the end, Mr. Denys said, living in an old house is just plain expensive.

"The older houses are more of a money pit than the newer houses."

OTTAWA CITIZEN

On the web for seven-day subscribers: Ottawa's residences are in such disrepair that the National Capital Commission has exhausted its 10-year, \$31.4-million renovation fund after only five years. Read the *Citizen's* investigation. www.ottawacitizen.com