# **Lenox:** Tuning the 'Baby Grand'

Continued from Page 42

exploratory work that involved cutting test holes to peer inside the building.

"There were so many surprises; most were about how the building was put together," said Saunders. "In reality, the facades from one floor to the next were different."

One not-so-surprising discovery was that the century-old hotel had settled. However, explains Teller, this common occurrence posed a dilemma.

Depending on which corner was examined, the building leaned between six and 12 inches inward and outward. Not only could that not be changed, but because the steel structure matched the various angles, the brick had to follow the steel.

Bricklayers, who normally build everything plumb and true, faced a unique situation: They had to put the brick on crooked or at an angle, but make it look perfectly straight.

Mortar samples also were analyzed to duplicate the original color, and the old brick found new life by way of a recycling center.

# But it should be straight

Installing 21st-century energy-efficient windows was equally tricky. They had to be installed plumb and the window openings weren't.

The solution? Oversize the rough openings to allow sufficient room to shim the windows within the space. And yes, each of the 613 windows was a custom fit.

Another discovery was that construction on each face of the building was different. "Architects designed the building, but a lot of the interior details were left to tradespeople," said Teller.

How steel columns were encased, for example, varied from place to place. In addition, the quality of brick work changed on each floor. "The higher we went, the less skilled the work," said Teller. "But that was pretty typical; workers had to practice their skills somewhere, and a mistake or two would be impossible to see from the street."

Contractors also restored and replaced the terra cotta used as window surrounds and exterior decorations, such as the Greek Key on the front of the building. By the 21st century, this older form of pre-cast concrete had cracks too. Workers took down almost 600 pieces that weighed between 75 and 300 pounds each.

For this restoration task, however, new technology took over. "We salvaged parts of the terra cotta and brought them to a mold maker who made the forms and then sprayed in glass fiber with reinforced plastic," said Cook.

# What you see today

At the end of the project — scaffolding came down in October — the Lenox Hotel is a true picture of its former self, albeit with more than a few major improvements, many of which are invisible.

First, the steel structure was repaired. Besides building a cavity wall to allow the flow-through of water, insulation was added. The new energy-efficient windows, which can be opened manually, add sound-proofing and reduce dust infiltration and sun glare.

On the other hand, the visible changes are the most impressive. Not only does the Lenox still look like itself, several original details are back. The roof line cornice removed about 50 years ago is one of the returnees.

"There were easier ways to do this project, but this was the right way," said Saunders. "People think we simply cleaned the building, and that's the highest compliment we can get."

November 1-7, 2005

# Lenox Hotel Restoration



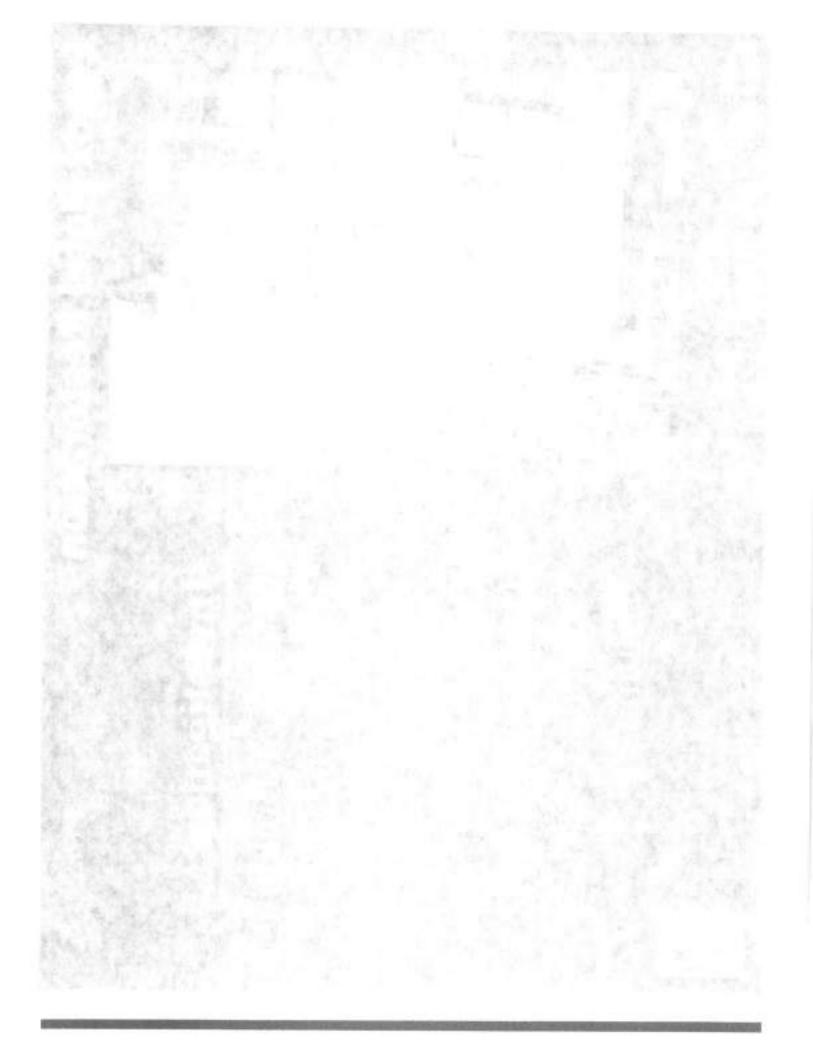
# Investigation

 Corner of Building at Boylston and Exeter Streets
Long Vortical

Long Vertical Crack over Very Corroded Steel Column



**CBI** Consulting Inc.



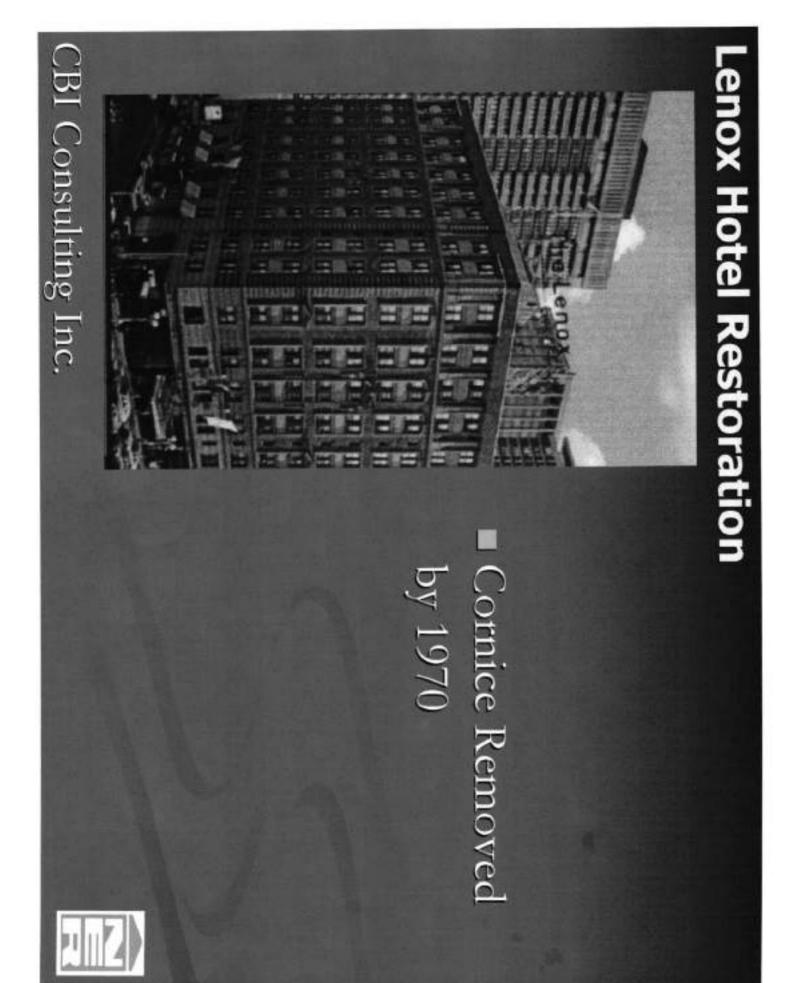
# Lenox Hotel Restoration

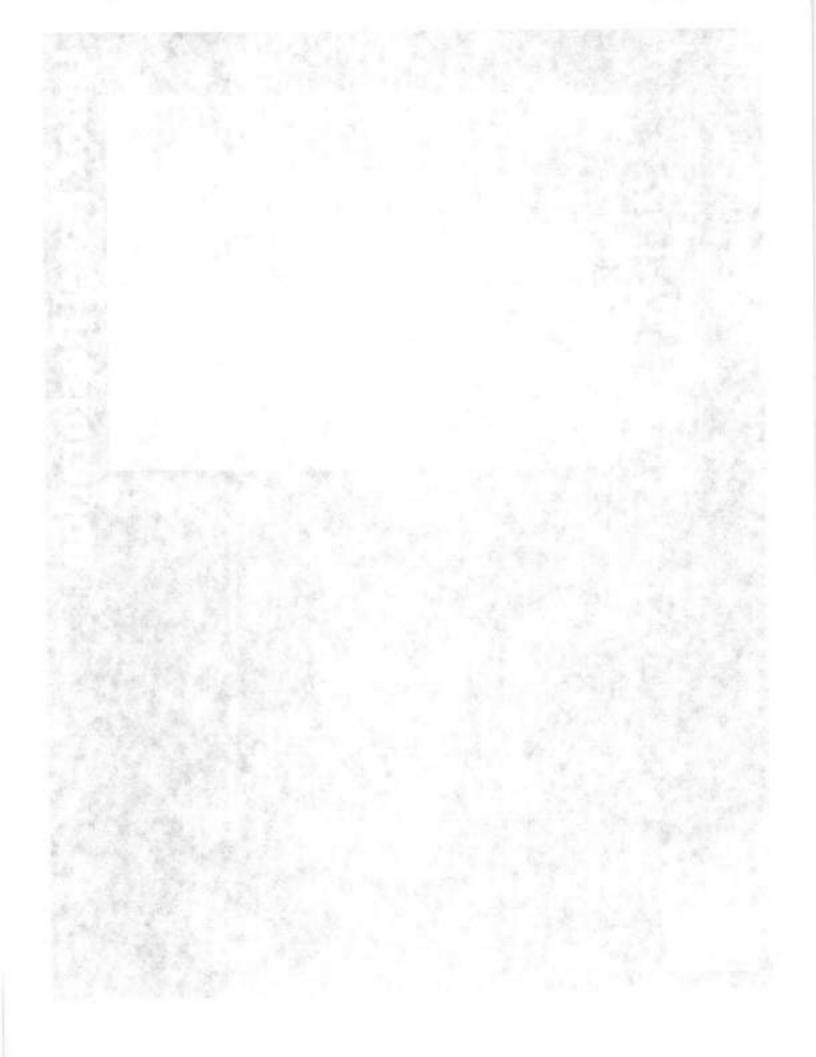


# Demolition Boylston Street Partial Demolition



CBI Consulting Inc.



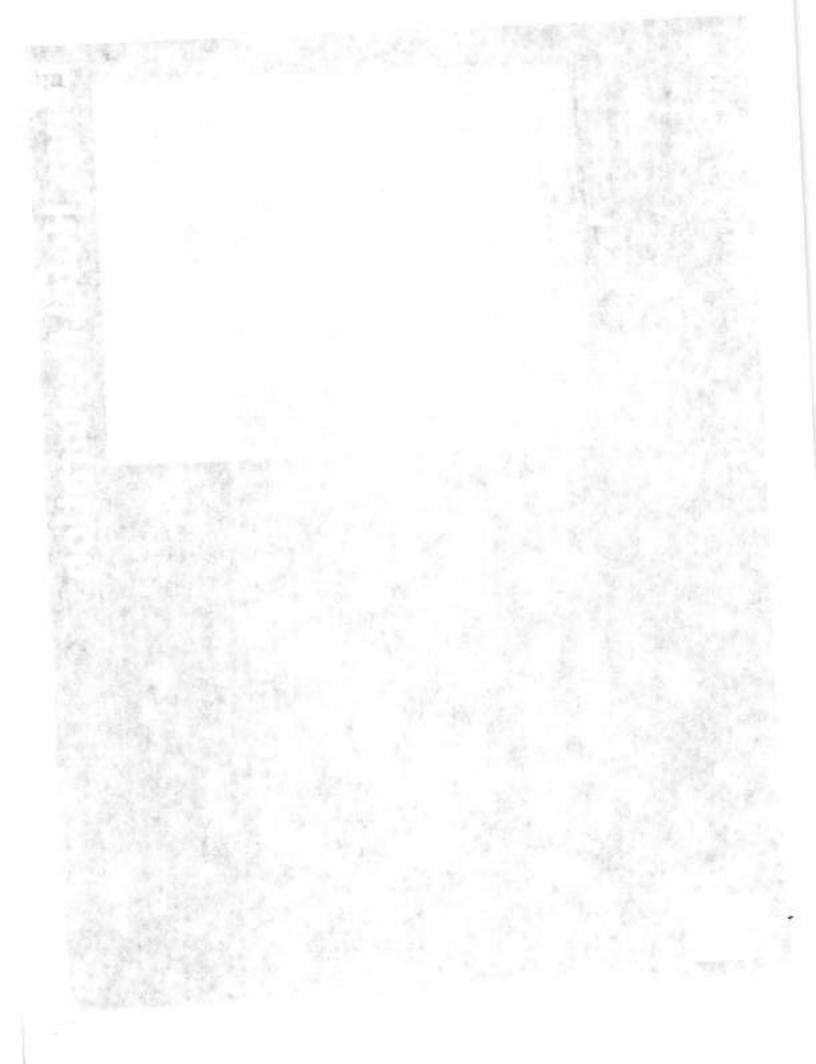






Investigation Red Plywood over Test Holes









# GFRP

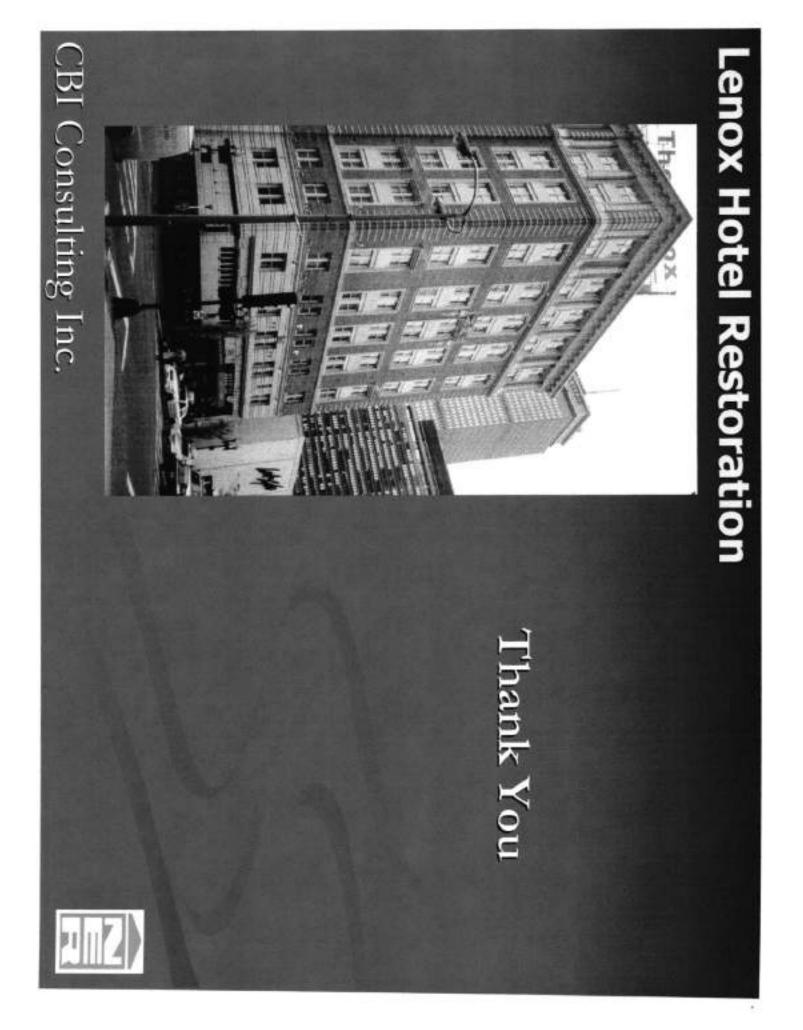
Continuous
Greek Key with
Flashing and SS
Support Clips
PT Blocking was
Covered with

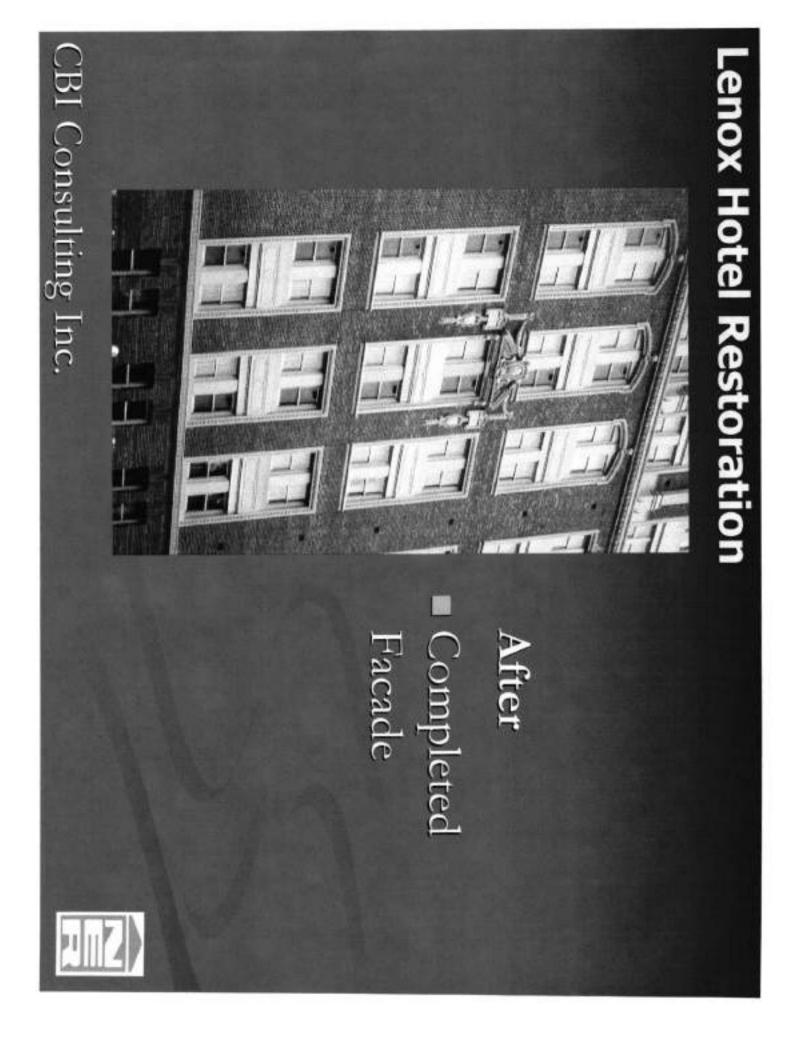


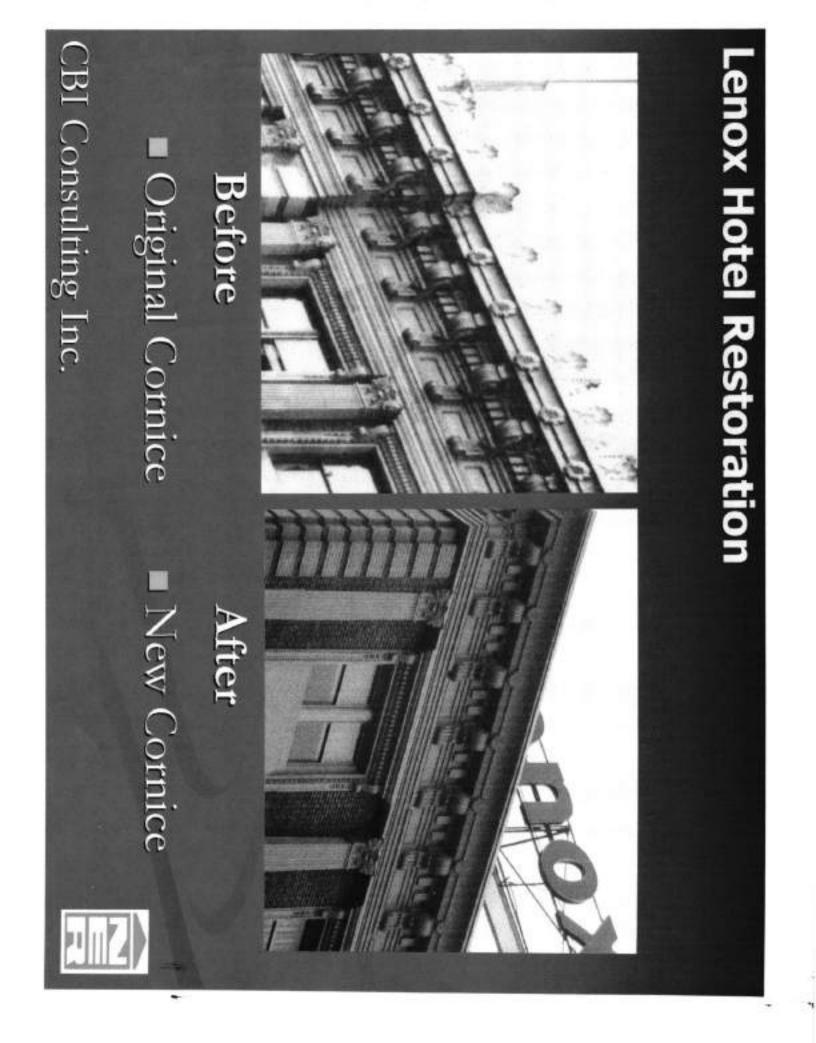
Blue Skin

CBI Consulting Inc.









July 1, 2003

Boston Preservation Alliance 45 School Street Boston, MA 02108

To Whom It May concern:

This letter shall serve as notice that we are submitting the Lenox Hotel Façade Restoration Project for the 2003 Preservation Achievement Awards in Categories 2, 5, and 6. Our Application information is as follows:

Categories:	2, 5, 6.
Project Name:	Lenox Hotel Façade Restoration
Owner/Developer:	Saunders Hotel Group Todd Saunders, Owner's Representative
Address:	710 Boylston Street Boston, MA 02116-2699
Sponsoring Organizations:	Owner – Saunders Hotel Group Contact Todd Saunders, 781-861-8224 Architect / Structural Engineer – CBI Consulting Inc. Contact Michael Teller, A.I.A., 617-268-8977 Contractor – NER Construction Management, Inc. Contact Andy Bear, 978-988-1111 Lighting Consultant – Schweppe Lighting Design, Inc. Contact D. Schweppe, 978-369-3866
Brief Description of Project:	Repairs to the structural steel and deterioration of the masonry were so widespread that the existing façade could not be salvaged. After repair, the entire façade was replaced to match the existing in every way. In fact, additional historic details were replaced including the 8°-0" tall roof cornice that had been removed in the 60's. A totally new lighting system was installed to highlight the building exterior as well.
Significance of Project:	The Lenox Hotel is on the National Historic Register and is listed with the Historical Hotels of America. While it is outside the Back Bay Architectural District and Mass Historic had no jurisdiction over this project, we worked with Boston Landmarks to maintain the original historical character as the building is key to the fabric of the Back Bay. The Hotel is also a leader in green design and makes energy efficiency and resource conservation a priority. Although
Comments:	See Attached Article and PowerPoint Presentation.
Very Truly Yours,	
CBI Contenting Inc	

CBI

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Principal

MST, 99184GL103 Boston Preservation Alliance Application

# Tuning hub's 'Baby Grand' raises unique design issues

## BY BARBARA FORSTER SPECIAL TO THE JOURNAL

State-of-the-art technology doesn't stand still. Sooner or later, every newly touted technique is surpassed by the next latest and greatest.

Take the case of the Lenox Hotel, designed by Arthur H. Bowditch and built in 1900. Listed on the National Register of Historic Places, the Lenox was the first hotel in the Northern

Hemisphere to open its doors in the 20th century.

Boston's self-"Baby touted Grand," a Back Bay mainstay, was the focus of a recent \$7.5 million renovation-and restoration-project that, among other things, served to highlight many of the issues architects and engineers face today when they deal with outmoded and in retrospect, misguided construction techniques.

When it was built, the Lenox was a prime example of state-of-theart construction technology: multistory buildings

with steel frames. "But architects and builders didn't trust the steel completely," said Steve Cook, project manager for NER Construction Management Inc. in Wilmington, the general contractor in charge of the Lenox's recently completed restoration project. "So they filled in between the columns with load-bearing brick — three widths of brick tied together."

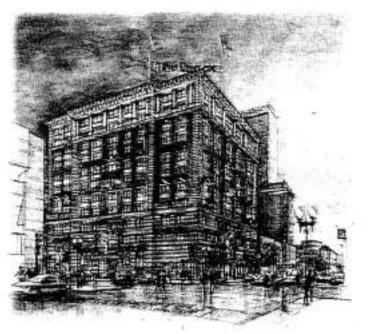
Obviously, the building wasn't going anywhere in a hurricane. Unfortunately, neither was water.

Technological advances such as "curtain walls" that allow water to evaporate or to pass between brick and steel, didn't happen until the 1920s. Lacking an outlet, water was trapped next to the steel, a combination that causes rust.

"When steel rusts, it expands to seven times its original thickness," said Michael Teller, principal at CBI Consulting Inc. in South Boston. "And no material withstands the pressure of steel when it rusts."

"Water also leaches out minerals in (brick) mortar, turning it to dust," added Cook.

The result wasn't pretty. "In the last couple years, we noticed some of the exterior brick was bulging," said Todd Saunders, president of Cornerstone



A rendering of the century-old Lenox Hotel, which recently underwent a major renovation and restoration project.

Advisors Inc. and the owner's representative.

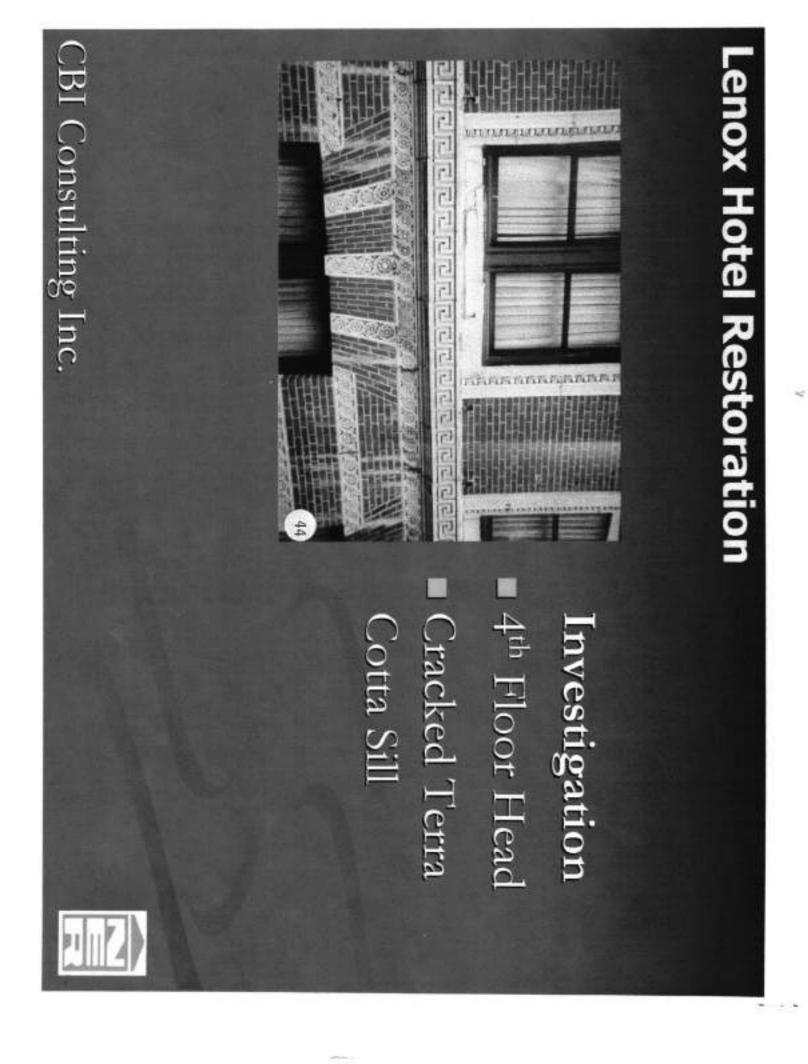
Worse, bricks were threatening to come loose. A few from the top floor did.

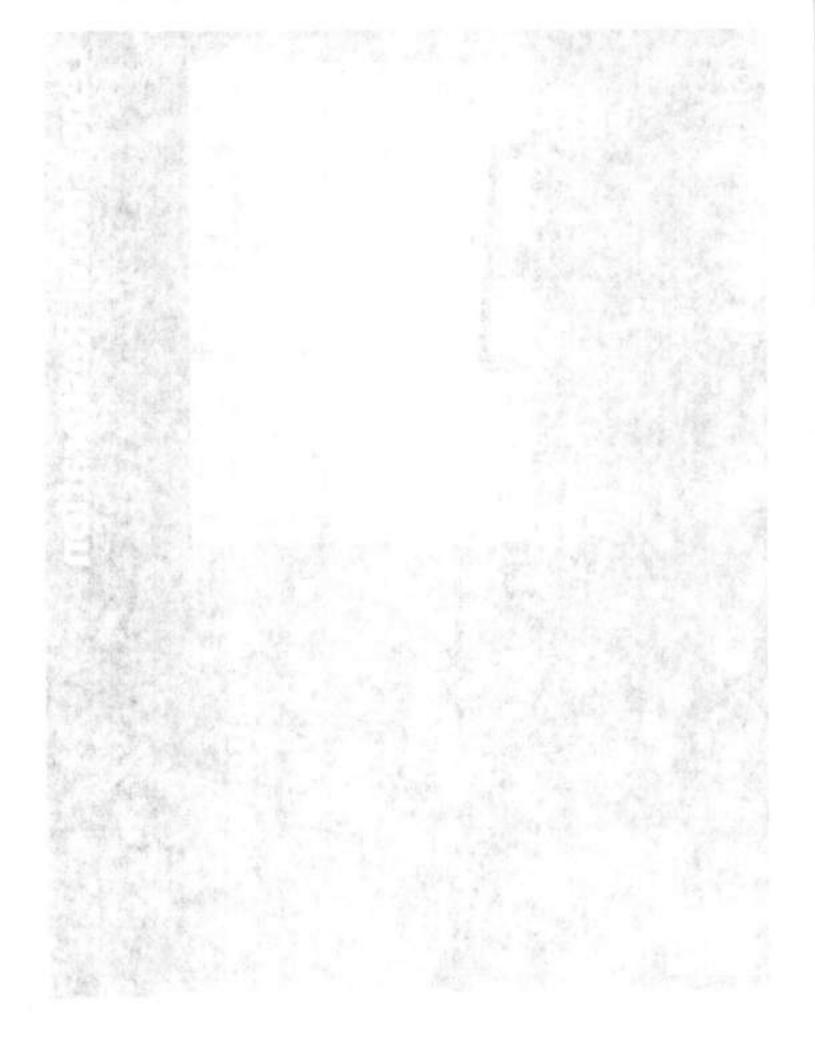
Saunders and company opted for restoration/renovation: remove the brick, fix or replace steel beams as needed, rebrick, and with a few additions restore the historic hotel to its original glory. That was the easy part.

# And then we found ...

"We didn't have the original building plans so we needed a game plan," said Saunders. "We had to figure out how the building was put together to come up with drawings that could be sent out for bid."

Over an 18-month period, engineers found some answers via three phases of Please see LENOX, Page 47





Lenox Hotel Before Photo





# Lenox Hotel 2002 Renovation









Gary L. Saunders, CHA Vice President and Managing Director 710 Boylston Street at Copley Place Boston, Massachusetts 02116

617-536-5300 Telex 928158

January 9, 1986

Ms. Susan Park Chairman Boston Preservation Alliance P.O. Box 1165 Boston, MA 02103

Dear Susan:

You really made my day!

I can't tell you how excited I was to start the new year with an article about the Lenox and the restoration to the exterior of the hotel that was only recently completed.

It was a pleasure to meet with Kevin Miller and I hope he enjoyed interviewing me and touring the hotel as much as I enjoyed showing it to him.

Susan, my sincere appreciation and thanks for following through on your promise to provide some exposure for the Lenox Hotel - You are truly a women of your word!

I do hope this letter finds you in good health and I look forward to speaking with you in the near future, and hopefully getting together for another breakfast or lunch whenever we can get our schedules to agree.

Please accept my best personal wishes for a happy, healthy and prosperous 1986.

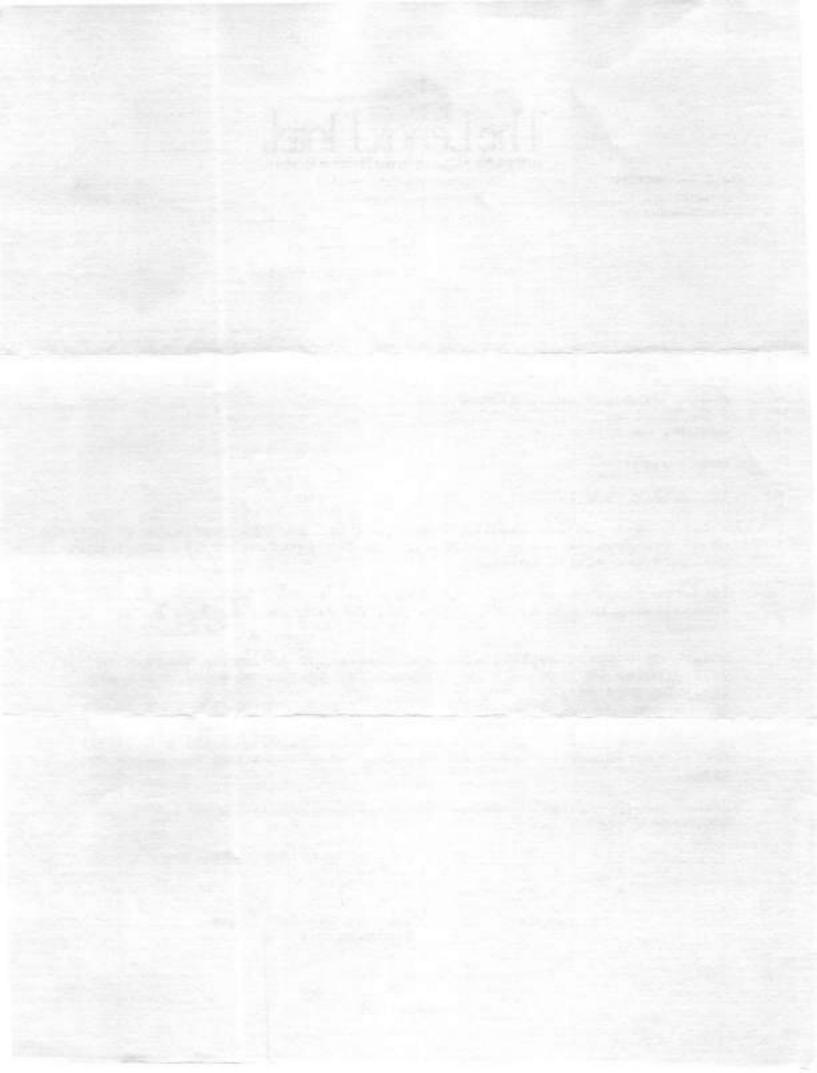
Most sincerely yours,

Harry

Gary L. Saunders, CHA Managing Director

GLS/mew

A Saunders Hotel



chant to stand

District: Back Bay

Name: LENOX HOTEL

Address: 710 Boylston Street Boston MIA 02116

Phone: (617)536-5300

Description: The Lenox Hotel is a turn-of-the-century Neo-Classical building offering 222 guest rooms decorated with French Provincial, Colonial and Oriental decors, many with the added warmth of a working or decorative fireplace. The hotel is conveniently located in Boston's Back Bay location, Copley Square.

Function information: The Lenox Hotel offers eight meeting rooms from its intimate wood-panelled Board Room to the gilded Dome Room.

Fee: \$150-800. The rental fee is negotiable depending on food and beverage needs.

Number accommodated: 150-200 seated; 350 standing

# **Roger Saunders to purchase Lenox**

Statements hint brothers seeking to end long-running real-estate feud

# By Richard Kindleberger GLOBE STAFF

Roger and Donald Saunders said yesterday they have agreed that Roger will buy the Lenox Hotel, the last of their jointly owned properties.

Not only that, but the two brothers in separate statements showed signs of trying to put their long-running feud behind them.

The Saunders Hotel Group, headed by older brother Roger, said it had agreed to purchase the 214-room Back Bay hotel for an undisclosed amount. Each brother owns 18 percent, with the remaining 64 percent held by other investors. Donald Saunders, who only a month ago said he would be hidding aggressively against his brother, said that he, as a Lenox owner, had approved the sale.

Bound by a confidentiality agreement aimed apparently at muting their differences, neither side would discuss details or say what had prompted Donald to back off. The sale had been billed as a private auction that would pit the brothers against each other and likely continue their hitter fead.

But yesterday, Donald, in a brief written announcement, said he had agreed with the other owners to the sale to Roger. He then went further: LENOX, Page 58



Reger Saunders in front of the Boston Park Plaza Hotel.

GLOBE STAFF PHOTO / DWILL, MYAM

The Geltex attering was quite the opposite, consisting of 2 million shares all old by the company. Now, Geltex would be able to sink more money into the development of its polymer pharmaceuticals and negotiate a better deal with a big corporate marketing partner down the road. President Mark Skaletsky made 57 presentations during a road show for the Geltex secondary offering, pitching the new strategy and the value it could create fater for shareholders. It worked like a scharm.

"Of course," said Skaletsky, "it doesn't hurt that the market in general is governing receptive." It never docs.

Steve Bailey and Steven Syre are anombers of the Glabe staff. They can be reached by e-mail at boscapsa globe.com Critics, nowever, urged the state not to get involved in a bidding war with other states – such as Rhode Island – that offer mutual funds tailored tax treatment. And they argued that if breaks are given, the companies must provide assurance they won't move employees out of state anyway.

About 44,000 people in Massachusetts -or 17 percent of those employed in the industry nationwide -- now work for fund companies such as Fidelity Investments, Putnam Funds and Massachusetts Financial Services.

Under questioning, industry advocates backed away from an estimate that 19,000 more jobs may be created by Massachusetts-based fund companies over the next three years, or that those jobs would produce \$104 million in new personal income tax receipts for the state treasury.

The job estimate "stretches credibility,"

largest.

Committee leaders repeated that they were prepared only to give the industry part of the relief it wants.

An industry sponsored bill calls for changing the tax code to levy corporate taxes based only on sales – excluding payroll and property factors that apply to other service companies – and then to limit taxable sales to funds sold to in-state residents.

Rep. Patrick F. Landers 3d, vice chairman of the committee, said he intends to introduce substitute legislation giving only the second part – known as a destination test. Landers said his bill also would mandate no breaks if fund companies don't maintain in-state employment at 90 percent of present levels. tice leader at KPMG Peat Marwick.

"In a nutshell, incentives matter," concluded the study, which looked at incentives such as tax credits and utility discounts.

Seventy-three percent of companies said such incentives influenced their decisions on relocation and expansion. "It's an important part of the puzzle, especially up here in the Northeast, where we have high costs," said Speros.

The study was released as the state Legislature began public hearings yesterday on whether to expand manufacturers' tax incentives to the mutual fund industry.

AIM, which has 3,600 member companies of various sizes, favors such an extension.

John Gould, president of AIM, said